Scottsdale

EPA

Contains No CBI

Form Approved
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EPA-OTS

0006119180

90-900000012

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Comprehensive Assessment Information Rule

REPORTING FORM

When completed, send this form to:	For Agency Use Only:
Document Processing Center Office of Toxic Substances, TS-790 U.S. Environmental Protection Agency 401 M Street, SW Washington, DC 20460 Attention: CAIR Reporting Office	Date of Receipt: Document Control Number: Docket Number:

EPA Form 7710-52

SECTION 1 GENERAL MANUFACTURER, IMPORTER, AND PROCESSOR INFORMATION

PART A GENERAL REPORTING INFORMATION

1.01 This Comprehensive Assessment Information Rule (CAIR) Reporting Form has been completed in response to the Federal Register Notice of..... [__][__] [__][__] [__][__]
mo. day year

CBI Not Applicable - notified by supplier

[__] a. If a Chemical Abstracts Service Number (CAS No.) is provided in the Federal Register, list the CAS No. ..... [0][2][6][4][7][1]-[6][2]-[5]

b. If a chemical substance CAS No. is not provided in the Federal Register, list either (i) the chemical name, (ii) the mixture name, or (iii) the trade name of the chemical substance as provided in the Federal Register.

(i) Chemical name as listed in the rule ..... Not Applicable

(ii) Name of mixture as listed in the rule .... Not Applicable

(iii) Trade name as listed in the rule ..... Not Applicable

c. If a chemical category is provided in the Federal Register, report the name of the category as listed in the rule, the chemical substance CAS No. you are reporting on which falls under the listed category, and the chemical name of the substance you are reporting on which falls under the listed category.

Name of category as listed in the rule ..... Not Applicable

CAS No. of chemical substance ..... [__][__][__][__][__][__]-[__][__]-[__]

Name of chemical substance ..... Not Applicable

1.02 Identify your reporting status under CAIR by circling the appropriate response(s).

CBI Manufacturer 1

[__] Importer 2

Processor ..... (3)

X/P manufacturer reporting for customer who is a processor 4

X/P processor reporting for customer who is a processor 5

[__] Mark (X) this box if you attach a continuation sheet.

SCOTTSDALE EPA ID # 00839636

1.03 Does the substance you are reporting on have an "x/p" designation associated with it in the above-listed Federal Register Notice? Not Applicable

CBI

[ ] Yes ..... [ ] Go to question 1.04

[ ] No ..... [ ] Go to question 1.05

1.04 a. Do you manufacture, import, or process the listed substance and distribute it under a trade name(s) different than that listed in the Federal Register Notice? Circle the appropriate response. Not Applicable

CBI

[ ] Yes 1

No 2

b. Check the appropriate box below:

[ ] You have chosen to notify your customers of their reporting obligations

Provide the trade name(s) .... _____

_____

[ ] You have chosen to report for your customers

[ ] You have submitted the trade name(s) to EPA one day after the effective date of the rule in the Federal Register Notice under which you are reporting.

1.05 If you buy a trade name product and are reporting because you were notified of your reporting requirements by your trade name supplier, provide that trade name.

CBI

[ ] Trade name ..... Isofoam PE-10A

Is the trade name product a mixture? Circle the appropriate response.

Yes ..... (1)

No 2

1.06 Certification -- The person who is responsible for the completion of this form must sign the certification statement below:

CBI

[ ] "I hereby certify that, to the best of my knowledge and belief, all information entered on this form is complete and accurate."

Robert W. Hardy (NAME) _____ (SIGNATURE) August 31, 1989 (DATE SIGNED)

Group Manager, Environmental Affairs (TITLE) (602) 441 - 2944 (TELEPHONE NO.)

[ ] Mark (X) this box if you attach a continuation sheet.

1.07 Exemptions From Reporting -- If you have provided EPA or another Federal agency with the required information on a CAIR Reporting Form for the listed substance within the past 3 years, and this information is current, accurate, and complete for the time period specified in the rule, then sign the certification below. You are required to complete section 1 of this CAIR form and provide any information now required but not previously submitted. Provide a copy of any previous submissions along with your Section 1 submission.

CBI

[ ]

"I hereby certify that, to the best of my knowledge and belief, all required information which I have not included in this CAIR Reporting Form has been submitted to EPA within the past 3 years and is current, accurate, and complete for the time period specified in the rule."

NAME	SIGNATURE	DATE SIGNED
TITLE	( ) - TELEPHONE NO.	DATE OF PREVIOUS SUBMISSION

1.08 CBI Certification -- If you have asserted any CBI claims in this report you must certify that the following statements truthfully and accurately apply to all of those confidentiality claims which you have asserted.

CBI

[ ]

"My company has taken measures to protect the confidentiality of the information, and it will continue to take these measures; the information is not, and has not been, reasonably ascertainable by other persons (other than government bodies) by using legitimate means (other than discovery based on a showing of special need in a judicial or quasi-judicial proceeding) without my company's consent; the information is not publicly available elsewhere; and disclosure of the information would cause substantial harm to my company's competitive position."

NAME	SIGNATURE	DATE SIGNED
TITLE	( ) - TELEPHONE NO.	

[ ] Mark (X) this box if you attach a continuation sheet.

PART B CORPORATE DATA

1.09 Facility Identification

CBI Name [H][O][T][O][R][O][L][A][ ][I][N][C][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ]

[ ] Address [8][2][O][I][ ][E][ ][M][C][D][D][E][L][L][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ]
Street

[S][C][O][T][T][S][D][A][L][E][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ]
City

[A][Z] [8][5][2][5][2]--[ ][ ][ ][ ]
State Zip

Dun & Bradstreet Number .....[O][O]-[8][3][9]-[9][6][3][6]

EPA ID Number .....[O][O][8][3][9][9][6][3][6]

Employer ID Number .....[3][6][I][I][I][5][8][O]

Primary Standard Industrial Classification (SIC) Code .....[3][6][6][I]

Other SIC Code .....[3][6][6][3]

Other SIC Code .....[3][8][I][2]

1.10 Company Headquarters Identification

CBI Name [H][O][T][O][R][O][L][A][ ][I][N][C][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ]

[ ] Address [I][3][O][3][ ][E][ ][A][L][G][O][N][Q][U][I][N][ ][R][D][ ][ ][ ][ ][ ][ ]
Street

[S][C][H][A][U][M][B][U][R][G][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ]
City

[I][L] [6][O][I][9][6]--[ ][ ][ ][ ]
State Zip

Dun & Bradstreet Number .....[O][O]-[I][3][2]-[5][4][6][3]

Employer ID Number .....[3][6][I][I][I][5][8][O]

☒ Mark (X) this box if you attach a continuation sheet.

1.09 Facility Identification

CBI [_]

Name [M]O]T]O]R]O]L]A]_]I]N]C]_]_]_]_]_]_]_]_]_]_]_]_]

Address [8]2]0]1]_]E]_]M]C]D]O]W]E]L]L]_]_]_]_]_]_]_]_]_]
Street

[S]C]O]T]T]S]D]A]L]E]_]_]_]_]_]_]_]_]_]_]_]_]_]_]_]
City

[A]Z] State [8]5]2]5]2]--[_]_]_]_] Zip

Dun & Bradstreet Number ....[7]4]-[8]0]3]-[7]5]7]8]*

EPA ID Number ....[_]_]_]_]_]_]_]_]

Employer ID Number ....[_]_]_]_]_]_]_]

Primary Standard Industrial Classification (SIC) Code ....[_]_]_]_]

Other SIC Code ....[_]_]_]_]

Other SIC Code ....[_]_]_]_]

*Additional D&B for this location.

1.10 Company Headquarters Identification

CBI [_]

Name [_]

Address [_]
Street

[_]
City

[_]_] State [_]_]_]_]_]--[_]_]_]_] Zip

Dun & Bradstreet Number ....[_]_]-[_]_]_]-[_]_]_]_]

Employer ID Number ....[_]_]_]_]_]_]_]

[_] Mark (X) this box if you attach a continuation sheet.

1.11 Parent Company Identification

CBI [ ] Name [ ]

Address [ ]
Street

[ ]
City

[ ] State [ ]--[ ] Zip

Dun & Bradstreet Number ....[ ]-[ ]-[ ]

1.12 Technical Contact

CBI [ ] Name [GLORIA GOWAN]

Title [ENVIRONMENTAL ENGINEER]

Address [8201 E MCDOWELL]
Street

[SCOTTSDALE]
City

[AZ] State [85252--1417] Zip

Telephone Number ....[602]-[941]-[2594]

1.13 This reporting year is from .... [01] Mo. [88] Year to [12] Mo. [88] Year

---

[ ] Mark (X) this box if you attach a continuation sheet.

1.14 Facility Acquired -- If you purchased this facility during the reporting year, provide the following information about the seller:

Not Applicable

CBI Name of Seller [_]

[_] Mailing Address [_]
Street

[_]
City

[_][_] [_][_][_][_][_]--[_][_][_][_]
State Zip

Employer ID Number .....[_][_][_][_][_][_][_][_]

Date of Sale .....[_][_] [_][_] [_][_]
Mo. Day Year

Contact Person [_]

Telephone Number .....[_][_][_]-[_][_][_]-[_][_][_][_]

1.15 Facility Sold -- If you sold this facility during the reporting year, provide the following information about the buyer:

Not Applicable

CBI Name of Buyer [_]

[_] Mailing Address [_]
Street

[_]
City

[_][_] [_][_][_][_][_]--[_][_][_][_]
State Zip

Employer ID Number .....[_][_][_][_][_][_][_][_]

Date of Purchase .....[_][_] [_][_] [_][_]
Mo. Day Year

Contact Person [_]

Telephone Number .....[_][_][_]-[_][_][_]-[_][_][_][_]

[_] Mark (X) this box if you attach a continuation sheet.

1.16 For each classification listed below, state the quantity of the listed substance that was manufactured, imported, or processed at your facility during the reporting year.

CBI

[ ]

Classification	Quantity (kg/yr)
Manufactured	0
Imported	0
Processed (include quantity repackaged)	1.3
Of that quantity manufactured or imported, report that quantity:	
In storage at the beginning of the reporting year	NA*
For on-site use or processing	NA
For direct commercial distribution (including export)	NA
In storage at the end of the reporting year	NA
Of that quantity processed, report that quantity:	
In storage at the beginning of the reporting year	0
Processed as a reactant (chemical producer)	0
Processed as a formulation component (mixture producer)	0
Processed as an article component (article producer)	1.3
Repackaged (including export)	0
In storage at the end of the reporting year	0

NA* means Not Applicable

[ ] Mark (X) this box if you attach a continuation sheet.

PART C IDENTIFICATION OF MIXTURES

1.17 Mixture -- If the listed substance on which you are required to report is a mixture or a component of a mixture, provide the following information for each component chemical. (If the mixture composition is variable, report an average percentage of each component chemical for all formulations.)

CBI PE-10 Part A

[ ]

Component Name	Supplier Name	Average % Composition by Weight (specify precision, e.g., 45% ± 0.5%)
Tolvene Diisocyanate	Isofoam Systems	60 ± NA
TDI Prepolymers	Isofoam Systems	40 ± NA
	Total	100 ± NA 100%

☒ Mark (X) this box if you attach a continuation sheet.

PART C IDENTIFICATION OF MIXTURES

1.17 Mixture -- If the listed substance on which you are required to report is a mixture or a component of a mixture, provide the following information for each component chemical. (If the mixture composition is variable, report an average percentage of each component chemical for all formulations.)

CBI Ablebond 908-3

[ ]

Component Name	Supplier Name	Average % Composition by Weight (specify precision, e.g., 45% ± 0.5%)
Toluene Diisocyanate	Ablestik	<1 ± NA
Magnesium Oxide Filler	Ablestik	75 ± NA
Prepolymer	Ablestik	12.5 ± NA
Polyol	Ablestik	12.5 ± NA
	Total	100%

[ ] Mark (X) this box if you attach a continuation sheet.

2.04 State the quantity of the listed substance that your facility manufactured, imported, or processed during the 3 corporate fiscal years preceding the reporting year in descending order.

CBI

[ ] Year ending ..... [1][2] Mo. [8][7] Year

Quantity manufactured ..... NA* kg

Quantity imported ..... NA kg

Quantity processed ..... UK kg

Year ending ..... [1][2] Mo. [8][6] Year

Quantity manufactured ..... NA kg

Quantity imported ..... NA kg

Quantity processed ..... UK kg

Year ending ..... [1][2] Mo. [8][5] Year

Quantity manufactured ..... NA kg

Quantity imported ..... NA kg

Quantity processed ..... UK kg

2.05 Specify the manner in which you manufactured the listed substance. Circle all appropriate process types. NA

CBI

[ ]

Continuous process 1

Semicontinuous process 2

Batch process 3

* NA means not Applicable

[ ] Mark (X) this box if you attach a continuation sheet.

2.06 CBI Specify the manner in which you processed the listed substance. Circle all appropriate process types.

[ ]

Continuous process 1

Semicontinuous process 2

Batch process ..... (3)

2.07 CBI State your facility's name-plate capacity for manufacturing or processing the listed substance. (If you are a batch manufacturer or batch processor, do not answer this question.)

[ ]

Manufacturing capacity ..... NA* kg/yr

Processing capacity ..... NA kg/yr

2.08 CBI If you intend to increase or decrease the quantity of the listed substance manufactured, imported, or processed at any time after your current corporate fiscal year, estimate the increase or decrease based upon the reporting year's production volume.

[ ]

	Manufacturing Quantity (kg)	Importing Quantity (kg)	Processing Quantity (kg)
Amount of increase	NA	NA	UK
Amount of decrease	NA	NA	UK

* NA means not applicable.

[ ] Mark (X) this box if you attach a continuation sheet.

2.09 For the three largest volume manufacturing or processing process types involving the listed substance, specify the number of days you manufactured or processed the listed substance during the reporting year. Also specify the average number of hours per day each process type was operated. (If only one or two operations are involved, list those.)

CBI

[ ]

	Days/Year	Average Hours/Day
Process Type #1 (The process type involving the largest quantity of the listed substance.)		
Manufactured	NA*	NA
Processed	32	2.5
Process Type #2 (The process type involving the 2nd largest quantity of the listed substance.)		
Manufactured	NA	NA
Processed	1	0.5
Process Type #3 (The process type involving the 3rd largest quantity of the listed substance.)		
Manufactured	NA	NA
Processed	NA	NA

2.10 State the maximum daily inventory and average monthly inventory of the listed substance that was stored on-site during the reporting year in the form of a bulk chemical. Not Required

CBI

[ ]

Maximum daily inventory ..... ____ _____ kg

Average monthly inventory ..... _____ kg

* NA means not applicable

[ ] Mark (X) this box if you attach a continuation sheet.

2.11 Related Product Types -- List any byproducts, coproducts, or impurities present with the listed substance in concentrations greater than 0.1 percent as it is manufactured, imported, or processed. The source of byproducts, coproducts, or impurities means the source from which the byproducts, coproducts, or impurities are made or introduced into the product (e.g., carryover from raw material, reaction product, etc.).

CBI

[ ]

CAS No.	Chemical Name	Byproduct, Coproduct or Impurity[1]	Concentration (%) (specify ± % precision)	Source of Byproducts, Coproducts, or Impurities
NA	NA	NA	NA	NA

[1] Use the following codes to designate byproduct, coproduct, or impurity:

B = Byproduct
C = Coproduct
I = Impurity

[ ] Mark (X) this box if you attach a continuation sheet.

2.12 Existing Product Types -- List all existing product types which you manufactured, imported, or processed using the listed substance during the reporting year. List the quantity of listed substance you use for each product type as a percentage of the total volume of listed substance used during the reporting year. Also list the quantity of listed substance used captively on-site as a percentage of the value listed under column b., and the types of end-users for each product type. (Refer to the instructions for further explanation and an example.)

CBI
[ ]

a. Product Types[1]	b. % of Quantity Manufactured, Imported, or Processed	c. % of Quantity Used Captively On-Site	d. Type of End-Users[2]
L	99.9	100	H
K	0.1	100	H

[1]Use the following codes to designate product types:

A = Solvent
B = Synthetic reactant
C = Catalyst/Initiator/Accelerator/Sensitizer
D = Inhibitor/Stabilizer/Scavenger/Antioxidant
E = Analytical reagent
F = Chelator/Coagulant/Sequestrant
G = Cleanser/Detergent/Degreaser
H = Lubricant/Friction modifier/Antiwear agent
I = Surfactant/Emulsifier
J = Flame retardant
K = Coating/Binder/Adhesive and additives
L = Moldable/Castable/Rubber and additives
M = Plasticizer
N = Dye/Pigment/Colorant/Ink and additives
O = Photographic/Reprographic chemical and additives
P = Electrodeposition/Plating chemicals
Q = Fuel and fuel additives
R = Explosive chemicals and additives
S = Fragrance/Flavor chemicals
T = Pollution control chemicals
U = Functional fluids and additives
V = Metal alloy and additives
W = Rheological modifier
X = Other (specify) _____

[2]Use the following codes to designate the type of end-users:

I = Industrial
CM = Commercial
CS = Consumer
H = Other (specify) Government

[ ] Mark (X) this box if you attach a continuation sheet.

2.13 Expected Product Types -- Identify all product types which you expect to manufacture, import, or process using the listed substance at any time after your current corporate fiscal year. For each use, specify the quantity you expect to manufacture, import, or process for each use as a percentage of the total volume of listed substance used during the reporting year. Also list the quantity of listed substance used captively on-site as a percentage of the value listed under column b., and the types of end-users for each product type. (Refer to the instructions for further explanation and an example.)

CBI
[ ]

a. Product Types[1]	b. % of Quantity Manufactured, Imported, or Processed	c. % of Quantity Used Captively On-Site	d. Type of End-Users[2]
UK	UK	UK	UK

[1]Use the following codes to designate product types:

A = Solvent
B = Synthetic reactant
C = Catalyst/Initiator/Accelerator/Sensitizer
D = Inhibitor/Stabilizer/Scavenger/Antioxidant
E = Analytical reagent
F = Chelator/Coagulant/Sequestrant
G = Cleanser/Detergent/Degreaser
H = Lubricant/Friction modifier/Antiwear agent
I = Surfactant/Emulsifier
J = Flame retardant
K = Coating/Binder/Adhesive and additives
L = Moldable/Castable/Rubber and additives
M = Plasticizer
N = Dye/Pigment/Colorant/Ink and additives
O = Photographic/Reprographic chemical and additives
P = Electrodeposition/Plating chemicals
Q = Fuel and fuel additives
R = Explosive chemicals and additives
S = Fragrance/Flavor chemicals
T = Pollution control chemicals
U = Functional fluids and additives
V = Metal alloy and additives
W = Rheological modifier
X = Other (specify) _____

[2]Use the following codes to designate the type of end-users:

I = Industrial
CM = Commercial
CS = Consumer
H = Other (specify) _____

[ ] Mark (X) this box if you attach a continuation sheet.

2.14 CBI [ ] Final Product -- Complete the following table for each type of final product manufactured, imported, or processed at your facility that contains the listed substance other than as an impurity. The final product does not contain the listed substance. Not Applicable

a. Product Type[1]	b. Final Product's Physical Form[2]	c. Average % Composition of Listed Substance in Final Product	d. Type of End-Users[3]
—	—	—	—

[1]Use the following codes to designate product types:

A = Solvent
B = Synthetic reactant
C = Catalyst/Initiator/Accelerator/ Sensitizer
D = Inhibitor/Stabilizer/Scavenger/ Antioxidant
E = Analytical reagent
F = Chelator/Coagulant/Sequestrant
G = Cleanser/Detergent/Degreaser
H = Lubricant/Friction modifier/Antiwear agent
I = Surfactant/Emulsifier
J = Flame retardant
K = Coating/Binder/Adhesive and additives
L = Moldable/Castable/Rubber and additives
M = Plasticizer
N = Dye/Pigment/Colorant/Ink and additives
O = Photographic/Reprographic chemical and additives
P = Electrodeposition/Plating chemicals
Q = Fuel and fuel additives
R = Explosive chemicals and additives
S = Fragrance/Flavor chemicals
T = Pollution control chemicals
U = Functional fluids and additives
V = Metal alloy and additives
W = Rheological modifier
X = Other (specify) _____

[2]Use the following codes to designate the final product's physical form:

A = Gas
B = Liquid
C = Aqueous solution
D = Paste
E = Slurry
F1 = Powder
F2 = Crystalline solid
F3 = Granules
F4 = Other solid
G = Gel
H = Other (specify) _____

[3]Use the following codes to designate the type of end-users:

I = Industrial
CM = Commercial
CS = Consumer
H = Other (specify) _____

[ ] Mark (X) this box if you attach a continuation sheet.

2.15 Circle all applicable modes of transportation used to deliver bulk shipments of the
CBI listed substance to off-site customers. Not Applicable

[ ] Truck 1

Railcar 2

Barge, Vessel 3

Pipeline 4

Plane 5

Other (specify) _____ 6

2.16 Customer Use -- Estimate the quantity of the listed substance used by your customers
or prepared by your customers during the reporting year for use under each category
CBI of end use listed (i-iv). Not Applicable

[ ]

Category of End Use

i. Industrial Products

Chemical or mixture ..... — kg/yr

Article ..... — kg/yr

ii. Commercial Products

Chemical or mixture ..... — kg/yr

Article ..... — kg/yr

iii. Consumer Products

Chemical or mixture ..... — kg/yr

Article ..... — kg/yr

iv. Other

Distribution (excluding export) ..... — kg/yr

Export ..... — kg/yr

Quantity of substance consumed as reactant ..... — kg/yr

Unknown customer uses ..... — kg/yr

[ ] Mark (X) this box if you attach a continuation sheet.

SECTION 3 PROCESSOR RAW MATERIAL IDENTIFICATION

PART A GENERAL DATA

3.01 Specify the quantity purchased and the average price paid for the listed substance for each major source of supply listed. Product trades are treated as purchases. CBI The average price is the market value of the product that was traded for the listed substance.

[ ]

Source of Supply	Quantity (kg)	Average Price ($/kg)
The listed substance was manufactured on-site.	NA*	NA
The listed substance was transferred from a different company site.	NA	NA
The listed substance was purchased directly from a manufacturer or importer.	NA	NA
The listed substance was purchased from a distributor or repackager.	NA	NA
The listed substance was purchased from a mixture producer.	20.4**	13.55

3.02 Circle all applicable modes of transportation used to deliver the listed substance to CBI your facility.

[ ]

Truck ..... (1)

Railcar 2

Barge, Vessel 3

Pipeline 4

Plane 5

Other (specify) _____ 6

* NA means not applicable

** Quantity of mixture

☒ Mark (X) this box if you attach a continuation sheet.

SECTION 3 PROCESSOR RAW MATERIAL IDENTIFICATION

PART A GENERAL DATA

3.01 CBI [ ] Specify the quantity purchased and the average price paid for the listed substance for each major source of supply listed. Product trades are treated as purchases. The average price is the market value of the product that was traded for the listed substance.

Source of Supply	Quantity (kg)	Average Price ($/kg)
The listed substance was manufactured on-site.	NA*	NA
The listed substance was transferred from a different company site.	NA	NA
The listed substance was purchased directly from a manufacturer or importer.	NA	NA
The listed substance was purchased from a distributor or repackager.	NA	NA
The listed substance was purchased from a mixture producer.	0.03	$50.12

3.02 CBI [ ] Circle all applicable modes of transportation used to deliver the listed substance to your facility.

Truck ..... (1)
Railcar 2
Barge, Vessel 3
Pipeline 4
Plane 5
Other (specify) _____ 6

* NA means not applicable

[ ] Mark (X) this box if you attach a continuation sheet.

3.03 CBI a. Circle all applicable containers used to transport the listed substance to your facility.

[ ]

Bags 1

Boxes 2

Free standing tank cylinders 3

Tank rail cars 4

Hopper cars 5

Tank trucks 6

Hopper trucks 7

Drums 8

Pipeline 9

Other (specify) Syringes ..... (10)

b. If the listed substance is transported in pressurized tank cylinders, tank rail cars, or tank trucks, state the pressure of the tanks. Not Applicable

Tank cylinders ..... ~ mmHg

Tank rail cars ..... ~ mmHg

Tank trucks ..... ~ mmHg

☒ Mark (X) this box if you attach a continuation sheet.

3.03 CBI a. Circle all applicable containers used to transport the listed substance to your facility.

[ ]

Bags 1

Boxes 2

Free standing tank cylinders 3

Tank rail cars 4

Hopper cars 5

Tank trucks 6

Hopper trucks 7

Drums 8

Pipeline 9

Other (specify) Can ..... (10)

b. If the listed substance is transported in pressurized tank cylinders, tank rail cars, or tank trucks, state the pressure of the tanks. Not Applicable

Tank cylinders ..... — mmHg

Tank rail cars ..... — mmHg

Tank trucks ..... — mmHg

[ ] Mark (X) this box if you attach a continuation sheet.

PART B RAW MATERIAL IN THE FORM OF A MIXTURE

3.04 If you obtain the listed substance in the form of a mixture, list the trade name(s) of the mixture, the name of its supplier(s) or manufacturer(s), an estimate of the CBI average percent composition by weight of the listed substance in the mixture, and the amount of mixture processed during the reporting year.

[ ]

Trade Name	Supplier or Manufacturer	Average % Composition by Weight (specify ± % precision)	Amount Processed (kg/yr)
Isofoam PE-10	Isofoam Systems	60 ± NA	20.4
Ablebond 908-3	Ablestik Labs	1 ± NA	0.03

[ ] Mark (X) this box if you attach a continuation sheet.

PART C RAW MATERIAL VOLUME

3.05 CBI [ ] State the quantity of the listed substance used as a raw material during the reporting year in the form of a class I chemical, class II chemical, or polymer, and the percent composition, by weight, of the listed substance.

	Quantity Used (kg/yr)	% Composition by Weight of Listed Substance in Raw Material (specify ± % precision)
Class I chemical	20.4	60 ± NA
	0.03	1 ± NA
Class II chemical	Not Applicable	Not Applicable
Polymer	Not Applicable	Not Applicable

[ ] Mark (X) this box if you attach a continuation sheet.

SECTION 4 PHYSICAL/CHEMICAL PROPERTIES

General Instructions:

If you are reporting on a mixture as defined in the glossary, reply to questions in Section 4 that are inappropriate to mixtures by stating "NA -- mixture."

For questions 4.06-4.15, if you possess any hazard warning statement, label, MSDS, or other notice that addresses the information requested, you may submit a copy or reasonable facsimile in lieu of answering those questions which it addresses.

PART A PHYSICAL/CHEMICAL DATA SUMMARY

4.01 Specify the percent purity for the three major[1] technical grade(s) of the listed substance as it is manufactured, imported, or processed. Measure the purity of the
CBI substance in the final product form for manufacturing activities, at the time you import the substance, or at the point you begin to process the substance.

[ ] Not Applicable - mixture

	Manufacture	Import	Process
Technical grade #1	_____% purity	_____% purity	_____% purity
Technical grade #2	_____% purity	_____% purity	_____% purity
Technical grade #3	_____% purity	_____% purity	_____% purity

[1] Major = Greatest quantity of listed substance manufactured, imported or processed.

4.02 Submit your most recently updated Material Safety Data Sheet (MSDS) for the listed substance, and for every formulation containing the listed substance. If you possess an MSDS that you developed and an MSDS developed by a different source, submit your version. Indicate whether at least one MSDS has been submitted by circling the appropriate response.

Yes ..... (1)

No 2

Indicate whether the MSDS was developed by your company or by a different source.

Your company 1

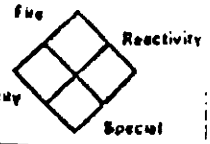
Another source ..... (2)

[ ] Mark (X) this box if you attach a continuation sheet.

MATERIAL SAFETY DATA SHEET

PRODUCT ISOFOAM® PE - 10A

NFPA HAZARD RATING
4 - EXTREME
3 - HIGH
2 - MODERATE
1 - SLIGHT
0 - INSIGNIFICANT



SECTION I

IPI **Isofoam® Systems**
Triumph Industrial Park, 505 Blue Ball Road
P.O. Box 70, Elkton, MD 21921 (301/392-4800)

EMERGENCY TELEPHONE
MANUFACTURER
(301) 392-4800
CHEMTREC 1-(800) 424-9300

3 CHEMICAL NAME OR FAMILY: Toluene Diisocyanate (TDI) Prepolymer

4 FORMULA: Proprietary

SECTION II — CHEMICAL AND PHYSICAL PROPERTIES

CHEMICAL

5 HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of Carbon and Nitrogen

6 INCOMPATIBILITY (KEEP AWAY FROM): Water (moisture), Alcohols, Amines, Strong Acids and Bases

7 LIST ALL TOXIC AND HAZARDOUS INGREDIENTS: Toluene Diisocyanate (TDI) and Toluene Diisocyanate (TDI) Prepolymers

PHYSICAL

8 FORM	liquid
9 ODOR	Sharp Pungent TDI Odor
10 APPEARANCE	Liquid
11 COLOR	Slight yellow
12 SPECIFIC GRAVITY (WATER = 1)	1.23 @ 25°C
13 BOILING PT.	203 °C / 398 °F
14 MELTING PT.	NDA °C / NDA °F
15 SOLUBILITY IN WATER AT NA °C	Reacts
16 % VOLATILE (BY WT %)	NDA
17 EVAP. RATE (Water = 1)	NDA
18 VAPOR PRESSURE (mm Hg @ 20°C)	< 0.011
19 VAPOR DENSITY (AIR = 1)	NDA
20 pH AS IS / pH (X X X)	NDA / NDA
21 STRONG ACID ☐ / STRONG BASE ☐ / STABLE XX / UNSTABLE ☐	
22 VISCOSITY SUS AT 100°F	NDA
23	Viscosity @ 25°C: 4,000 cps

SECTION III — FIRE AND EXPLOSION DATA

24 SPECIAL FIRE FIGHTING PROCEDURES: Firefighters must be equipped to prevent breathing of vapors or products of combustion. Must wear selfcontained breathing apparatus.

25 UNUSUAL FIRE AND EXPLOSION HAZARDS: Avoid moisture contamination in closed containers. Reaction with moisture will generate CO_2 which may rupture the container.

26 FLASH POINT (METHOD USED): C.O.C. > 150 °C > 300 °F

27 FLAMMABLE LIMITS %: LOWER NDA UPPER NDA

28 EXTINGUISHING AGENTS: (X) DRY CHEMICAL (X) CO_2 (X) WATER SPRAY (X) FOAM ( ) WATER FOG ( ) SAND/EARTH ( ) OTHER

SECTION IV — HEALTH HAZARD DATA

29 PERMISSIBLE CONCENTRATIONS (AIR): 0.02 ppm - O.S.H.A. TLV for TDI

30 EFFECTS OF OVEREXPOSURE: Irritant to eyes & respiratory tract. May cause headaches, nausea, coughing, shortness of breath, & chest discomfort. May result in respiratory distress.

31 TOXICOLOGICAL PROPERTIES: May cause allergic skin or respiratory reaction. Persons with known respiratory allergies should avoid exposure to this product.

32 EMERGENCY FIRST AID PROCEDURES — EYES: In case of eye contact, flush with plenty of water for at least 15 minutes. Call a physician.

33 SKIN CONTACT: Wash thoroughly with soap and water. Remove contaminated clothing & discard contaminated shoes. Wash clothing before reuse.

34 INHALATION: Remove from contaminated area to fresh air environment. Call a physician. If victim is not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen.

35 IF SWALLOWED: Call a physician immediately

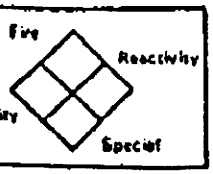
NA = NOT APPLICABLE NDA = NO DATA AVAILABLE < = LESS THAN > = MORE THAN

FORM NO. 851 (4/83)
4

IPI MATERIAL SAFETY DATA SHEET

PRODUCT ISOFOAM® PE-10W

NFPA HAZARD RATING
4 - EXTREME
3 - HIGH
2 - MODERATE
1 - SLIGHT
0 - INSIGNIFICANT



SECTION I

IPI Isofoam® Systems
Triumph Industrial Park, 505 Blue Ball Road
P.O. Box 70, Elkton, MD 21921 (301/392-4800)

EMERGENCY TELEPHONE
MANUFACTURER
(301) 392-4800
CHEMTREC 1-(800) 424-9300

3 CHEMICAL NAME OR FAMILY: Not Applicable

4 Blend of polyols, surfactants catalysts, and blowing agents.

SECTION II — CHEMICAL AND PHYSICAL PROPERTIES

CHEMICAL

5 HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of Carbon and Nitrogen

6 INCOMPATIBILITY (KEEP AWAY FROM): Reacts with Isocyanates

7 LIST ALL TOXIC AND HAZARDOUS INGREDIENTS: Amine Catalysts < 1 %

PHYSICAL

8 FORM: Liquid

9 ODOR: Mild

10 APPEARANCE: Viscous Liquid

11 COLOR: Clear Light Yellow

12 SPECIFIC GRAVITY (WATER = 1): 1.15 @ 25 °C

13 BOILING PT.: 100 °C / 212 °F

14 MELTING PT.: NA °C / NA °F

15 SOLUBILITY IN WATER AT 25 °C: Slight

16 % VOLATILE (BY WT %): NIL

17 EVAP. RATE (Water = 1): NIL

18 VAPOR PRESSURE (mm Hg at 20 °C): NA

19 VAPOR DENSITY (AIR = 1): > 1

20 pH AS IS: NDA
pH (X X X): NDA

21
STRONG ACID ☐
STRONG BASE ☐
STABLE ☒
UNSTABLE ☐

22 VISCOSITY SUS AT 100 °F: NDA

23 Viscosity @ 25 °C: 10,000 cps

SECTION III — FIRE AND EXPLOSION DATA

24 SPECIAL FIRE FIGHTING PROCEDURES: Firefighters must be equipped to prevent breathing of vapors or products of combustion. Wear self-contained breathing apparatus

25 UNUSUAL FIRE AND EXPLOSION HAZARDS: NDA

26 FLASH POINT (METHOD USED) Without CCl_3F/H_2O: > 190 °C > 374 °F

27 FLAMMABLE LIMITS %: LOWER NDA UPPER NDA

28 EXTINGUISHING AGENTS
☒ DRYCHEMICAL ☒ CO_2
☒ WATERSPRAY ☒ FOAM
☐ WATERFOG ☐ SAND/EARTH
☐ OTHER

SECTION IV — HEALTH HAZARD DATA

29 PERMISSIBLE CONCENTRATIONS (AIR): NDA

30 EFFECTS OF OVEREXPOSURE: Irritant to eyes and respiratory tract

31 TOXICOLOGICAL PROPERTIES: NDA

EMERGENCY FIRST AID PROCEDURES

32 EYES: Wash with large amounts of water for 15 minutes and see a physician.

33 SKIN CONTACT: Wipe off excess and wash area with soap & water. Remove contaminated clothing and discard contaminated shoes. Wash clothing before reuse.

34 INHALATION: Provide uncontaminated air supply and see a physician.

35 IF SWALLOWED: See a physician immediately.

NA = NOT APPLICABLE NDA = NO DATA AVAILABLE < = LESS THAN > = MORE THAN

IPI

MATERIAL SAFETY DATA SHEET

PRODUCT ISOFOAM[R] PE-10W

SECTION V — SPECIAL PROTECTION INFORMATION

Field	Entry
VENTILATION TYPE REQUIRED (LOCAL, MECHANICAL, SPECIAL) (36)	Mechanical
RESPIRATORY PROTECTION (SPECIFY TYPE) (37)	Use only NIOSH approved apparatus
PROTECTIVE GLOVES (38)	Impervious rubber or plastic
EYE PROTECTION (39)	Safety goggles
OTHER PROTECTIVE EQUIPMENT (40)	None

SECTION VI — HANDLING OF SPILLS OR LEAKS

PROCEDURES FOR CLEAN UP (41)

With adequate ventilation, cover with an inert absorbent such as clay or vermiculite and transfer to a waste container. Wash area with detergent and water.

WASTE DISPOSAL (42)

Dispose of consistent with Federal, State, and local regulations

SECTION VII — SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE (43)

Store between 40 and 80^0F. (5 - 27^0C)

SECTION VIII — TRANSPORTATION DATA

Field	Entry
UNREGULATED BY D.O.T. (44)	XX
REGULATED BY D.O.T (45)	
U.S. D.O.T. PROPER SHIPPING NAME (47)	NA
U.S. D.O.T. HAZARD CLASS (48)	NA
I.D. NUMBER (49)	NA
RQ (50)	
LABEL(S) REQUIRED (51)	NONE
FREIGHT CLASSIFICATION (52)	Liquid Plastic Material /NOIBN
SPECIAL TRANSPORTATION NOTES (53)	None
TRANSPORTATION EMERGENCY INFORMATION (46)	CHEM TREC 1-(800) 424-9300

SECTION IX — COMMENTS

(54) SPECIAL NOTICE: THE FOAM PRODUCED IS AN ORGANIC MATERIAL AND MUST BE CONSIDERED AS COMBUSTIBLE. THE FOAM MUST NOT BE LEFT EXPOSED OR UNPROTECTED. SHIELD THE FOAM FROM HEAT AND SPARKS WITH A THERMAL BARRIER.

SIGNATURE [signature]

TITLE Sales Service Supervisor

REVISION DATE 7/2/86

SENT TO ATTN: ______

DATE ______

SUPERSEDES ______

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind, express or implied, and we assume no responsibility for any loss, damage, or expense, direct or consequential, arising out of their use.

MATERIAL SAFETY DATA SHEET

1. PRODUCT IDENTIFICATION

TRADE NAME: Ablebond 908-3
CHEMICAL NAMES: Isocyanate Terminated Polyol
MANUFACTURER'S NAME: ABLESTIK LABORATORIES
ADDRESS: 833 West 182nd Street, Gardena, CA 90248 (213) 532-9341
REVISION DATE: 7/11/89

II HAZARDOUS INGREDIENTS

CHEMICAL NAMES	CAS NUMBERS	PERCENT	EXPOSURE LIMIT	
			ACGIH(TWA)	OSHA(PEL)
Toluene diisocyanate	584-84-9	< 1	0.005ppm	0.02ppm

III PHYSICAL PROPERTIES

VAPOR DENSITY (AIR=1): > 1
SPECIFIC GRAVITY: 2.2
SOLUBILITY IN WATER: Not applicable
VAPOR PRESSURE, mm Hg at 20°C: < 0.1
EVAPORATION RATE (ETHER =1): < 1
MELTING POINT(°F): Not applicable
BOILING POINT (°F @ 760 mm Hg): 482°
PERCENT VOLATILE BY WEIGHT: < 2
APPEARANCE AND ODOR: White heavy paste; pungent odor

IV FIRE AND EXPLOSION

FLASH POINT, °F (GIVE METHOD): 200° (Setaflash)
AUTOIGNITION TEMPERATURE: Not determined
FLAMMABLE LIMITS IN AIR, VOLUME %: LOWER Not determined UPPER Not determined
FIRE EXTINGUISHING MATERIALS: Dry chemical, foam.
FIRE EXTINGUISHING PROCEDURES: Wear self-contained breathing apparatus.
UNUSUAL FIRE AND EXPLOSION HAZARDS: Protect against inhalation of cyanate vapors and other decomposition/combustion products.

V HEALTH HAZARD INFORMATION

SYMPTOMS OF OVEREXPOSURE FOR EACH POTENTIAL ROUTE OF EXPOSURE

INHALED: Unknown for product mixture. Inhalation of isocyanate vapors can produce severe irritation of the mucous membranes in the respiratory tract, i.e. nose, throat, and lungs. Exposure of humans to concentrations of isocyanate vapor in excess of the maximum acceptable concentration has caused illness characterized by breathlessness, chest discomfort and reduced pulmonary function. Massive exposure to high concentrations has caused, within minutes, irritation of the trachea and larynx and severe coughing spasms. Concentrations of isocyanate vapors should be maintained below the TLV by engineering controls. Can cause sensitization in humans. TDI Inhalation-Human TCLo: 0.02ppm/2Y:PUL. TDI Inhalation-Human TCLo: 0.5ppm: IRR. Symptoms of overexposure may be delayed and could include dry cough, chest tightness, wheezing, shortness of breath, asthmatic type symptoms

CONTACT WITH SKIN: Unknown for product mixture. Isocyanates react with skin protein and tissue moisture. If not promptly removed, liquid spills on the skin can cause reddening, swelling, and blistering of exposed skin. REPEATED SKIN CONTACT HAS CAUSED SKIN SENSITIZATION IN HUMANS AND SHOULD BE AVOIDED. TDI: Skin-Rabbit: 500 mg/24H MOD. Overexposure may cause irritation, dermatitis and possible skin sensitization given prolonged or repeated skin contact.

CONTACT WITH EYES: Unknown for the mixture. Liquid isocyanates splashed into the eyes can be harmful to the delicate eye tissue and must be avoided. Injury results from reaction of the isocyanate with the eye fluid which may dehydrate the tissue and result in severe irritation of the eyelid and possible damage to the cornea (corneal opacity). Exposure to high concentrations of isocyanate vapor can lead to formation of solid crystals in the eye fluid causing mechanical irritation of the eyes hours after exposure. TDI Eye-Rabbit: 100 mg SEV. Overexposure can cause irritation, tearing, reddening and blurred vision.

ABSORBED THROUGH SKIN: Isocyanates react with skin protein and tissue moisture. Absorption through skin may be harmful.

SWALLOWED: Unknown for the mixture. Animal experiments indicate that the toxic effects of TDI or polymeric isocyanates, when ingested, are slight. The LD50 in rats for TDI is 5840 mg/kg. From these experiments, it is believed that ingestion of TDI or polymeric isocyanates would not be fatal to humans, but could result in irritation and corrosive action on the mouth and stomach tissue. Overexposure may cause nausea, vomiting, and gastrointestinal pain.

HEALTH EFFECTS OR RISKS FROM EXPOSURE:

ACUTE: See symptoms of overexposure, section V.

CHRONIC: Unknown for product mixture. Toluene Diisocyanate(TDI) is considered a suspect carcinogen as tested by National Toxicology Program, 1983, in rats and female mice. Administered by gavage to rats, TDI caused subcutaneous neoplasms or cancers in both sexes. Additionally, males developed pancreatic neoplasms and females pancreatic, liver and mammary neoplasms. In mice similarly exposed, TDI caused circulatory neoplasms and cancers (combined) and liver neoplasms in females but was not carcinogenic to males. (NTP 1983 Program Tech Report on Carcinogenic Study of Commercial Grade of TDI.)

FIRST AID: EMERGENCY PROCEDURE

EYE CONTACT: Immediately flush with water for 15 minutes lifting the upper and lower eyelids occasionally and obtain immediate medical attention.

SKIN CONTACT: Wash immediately with soap and water. If irritation persists, seek medical attention immediately

INHALED: Remove to fresh air immediately. Administer artificial respiration as required. Obtain medical attention.

INGESTION: Do not induce vomiting. Obtain immediate medical attention. If unavailable, contact nearest Poison Control Center.

SUSPECTED CANCER AGENT? Toluene diisocyanate is considered to be carcinogenic by NTP.

VI REACTIVITY DATA

STABILITY: _X_ STABLE __ UNSTABLE

CONDITIONS TO AVOID: Heat prior to cure.

INCOMPATIBILITY (MATERIALS TO AVOID): Moisture, strong oxidizing agents

HAZARDOUS DECOMPOSITION PRODUCTS (INCLUDING COMBUSTION PRODUCTS):

Carbon monoxide, carbon dioxide, nitrogen oxides, aromatic amines, aldehydes, and hydrogen cyanide

HAZARDOUS POLYMERIZATION: ___ MAY OCCUR _X_ WILL NOT OCCUR

CONDITIONS TO AVOID: None known

VII SPILL, LEAK AND DISPOSAL

SPILL RESPONSE PROCEDURES: Wipe up with solvent saturated toweling and collect in an appropriate container for disposal.

PREPARING WASTES FOR DISPOSAL: Dispose in approved chemical disposal area or in a manner which complies with all local, state and federal regulations.

VIII SPECIAL HANDLING INFORMATION

VENTILATION AND ENGINEERING CONTROLS: Provide adequate ventilation to minimize inhalation. Mechanical (local exhaust) recommended for all spray operations and elevated temperature uses.

RESPIRATORY PROTECTION: Wear NIOSH-MSHA approved self-contained positive pressure breathing apparatus as necessary within equipment limitations. Contaminant levels will vary dependent on the operation.

EYE PROTECTION: Safety goggles with side shields.

GLOVES: Rubber

OTHER CLOTHING AND EQUIPMENT: Protective equipment to cover exposed areas.

WORK PRACTICES, HYGIENIC PRACTICES: Vent curing oven to outdoors.

OTHER HANDLING AND STORAGE REQUIREMENTS: Store frozen at all times.

PROTECTIVE MEASURES DURING MAINTENANCE OF CONTAMINATED EQUIPMENT:

Avoid contact with skin, eyes and clothing. Good housekeeping is required. Avoid inhalation of vapors.

IX REGULATORY INFORMATION

SARA/TITLE III - TOXIC CHEMICALS LIST:

This product contains chemicals subject to the reporting requirements of section 313 of Title III of Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

< 2	584-84-9	Toluene diisocyanate

TSCA INVENTORY STATUS:

Chemical components listed on TSCA Inventory

CALIFORNIA PROPOSITION 65:

This product does not contain toxic chemicals currently on the California List of known carcinogens and reproductive toxins.

4.03 Submit a copy or reasonable facsimile of any hazard information (other than an MSDS) that is provided to your customers/users regarding the listed substance or any formulation containing the listed substance. Indicate whether this information has been submitted by circling the appropriate response.

Not Applicable - The articles the customer receives do not contain the listed substance.

Yes 1

No 2

4.04 For each activity that uses the listed substance, circle all the applicable number(s) corresponding to each physical state of the listed substance during the activity listed. Physical states for importing and processing activities are determined at the time you import or begin to process the listed substance. Physical states for manufacturing, storage, disposal and transport activities are determined using the final state of the product.

CBI

[ ]

	Physical State				
Activity	Solid	Slurry	Liquid	Liquified Gas	Gas
Manufacture	1	2	3	4	5
Import	1	2	3	4	5
Process	1	2	(3)	4	5
Store	(1)	2	(3)	4	5
Dispose	1	2	3	4	5
Transport	1	2	3	4	5

[ ] Mark (X) this box if you attach a continuation sheet.

4.05 Particle Size -- If the listed substance exists in particulate form during any of the following activities, indicate for each applicable physical state the size and the percentage distribution of the listed substance by activity. Do not include particles ≥10 microns in diameter. Measure the physical state and particle sizes for importing and processing activities at the time you import or begin to process the listed substance. Measure the physical state and particle sizes for manufacturing storage, disposal and transport activities using the final state of the product.

CBI

[ ] Not Applicable

Physical State		Manufacture	Import	Process	Store	Dispose	Transport
Dust	<1 micron						
	1 to <5 microns						
	5 to <10 microns						
Powder	<1 micron						
	1 to <5 microns						
	5 to <10 microns						
Fiber	<1 micron						
	1 to <5 microns						
	5 to <10 microns						
Aerosol	<1 micron						
	1 to <5 microns						
	5 to <10 microns						

[ ] Mark (X) this box if you attach a continuation sheet.

PART A RATE CONSTANTS AND TRANSFORMATION PRODUCTS

5.01 Indicate the rate constants for the following transformation processes.

a. Photolysis:

Absorption spectrum coefficient (peak) .... UK (1/M cm) at UK nm

Reaction quantum yield, ϕ ..... UK at UK nm

Direct photolysis rate constant, k_p, at ... UK 1/hr UK latitude

b. Oxidation constants at 25°C:

For $^1O_2$ (singlet oxygen), k_{ox} ..... UK 1/M hr

For RO_2 (peroxy radical), k_{ox} ..... UK 1/M hr

c. Five-day biochemical oxygen demand, BOD_5 ... UK mg/l

d. Biotransformation rate constant:

For bacterial transformation in water, k_b... UK 1/hr

Specify culture ..... UK

e. Hydrolysis rate constants:

For base-promoted process, k_B ..... UK 1/M hr

For acid-promoted process, k_A ..... UK 1/M hr

For neutral process, k_N ..... UK 1/hr

f. Chemical reduction rate (specify conditions) UK

g. Other (such as spontaneous degradation) ... UK

[ ] Mark (X) this box if you attach a continuation sheet.

PART B PARTITION COEFFICIENTS

5.02 a. Specify the half-life of the listed substance in the following media.

Media	Half-life (specify units)
Groundwater	UK
Atmosphere	UK
Surface water	UK
Soil	UK

b. Identify the listed substance's known transformation products that have a half-life greater than 24 hours.

CAS No.	Name	Half-life (specify units)		Media
UK	UK	UK	in	UK
			in	
			in	
			in	

5.03 Specify the octanol-water partition coefficient, K_{ow} ... UK at 25°C

Method of calculation or determination ..... UK

5.04 Specify the soil-water partition coefficient, K_d ..... UK at 25°C

Soil type ..... UK

5.05 Specify the organic carbon-water partition coefficient, K_{oc} ..... UK at 25°C

5.06 Specify the Henry's Law Constant, H ..... UK atm-m^3/mole

[ ] Mark (X) this box if you attach a continuation sheet.

5.07 List the bioconcentration factor (BCF) of the listed substance, the species for which it was determined, and the type of test used in deriving the BCF.

Bioconcentration Factor	Species	Test[1]
UK	UK	UK

[1]Use the following codes to designate the type of test:

F = Flowthrough
S = Static

[ ] Mark (X) this box if you attach a continuation sheet.

6.04 CBI [ ] For each market listed below, state the quantity sold and the total sales value of the listed substance sold or transferred in bulk during the reporting year.

Not Required

Market	Quantity Sold or Transferred (kg/yr)	Total Sales Value ($/yr)
Retail sales		
Distribution -- Wholesalers		
Distribution -- Retailers		
Intra-company transfer		
Repackagers		
Mixture producers		
Article producers		
Other chemical manufacturers or processors		
Exporters		
Other (specify)		
_____		

6.05 CBI [ ] Substitutes -- List all known commercially feasible substitutes that you know exist for the listed substance and state the cost of each substitute. A commercially feasible substitute is one which is economically and technologically feasible to use in your current operation, and which results in a final product with comparable performance in its end uses.

Substitute	Cost ($/kg)
UK	UK

[ ] Mark (X) this box if you attach a continuation sheet.

SECTION 7 MANUFACTURING AND PROCESSING INFORMATION

General Instructions:

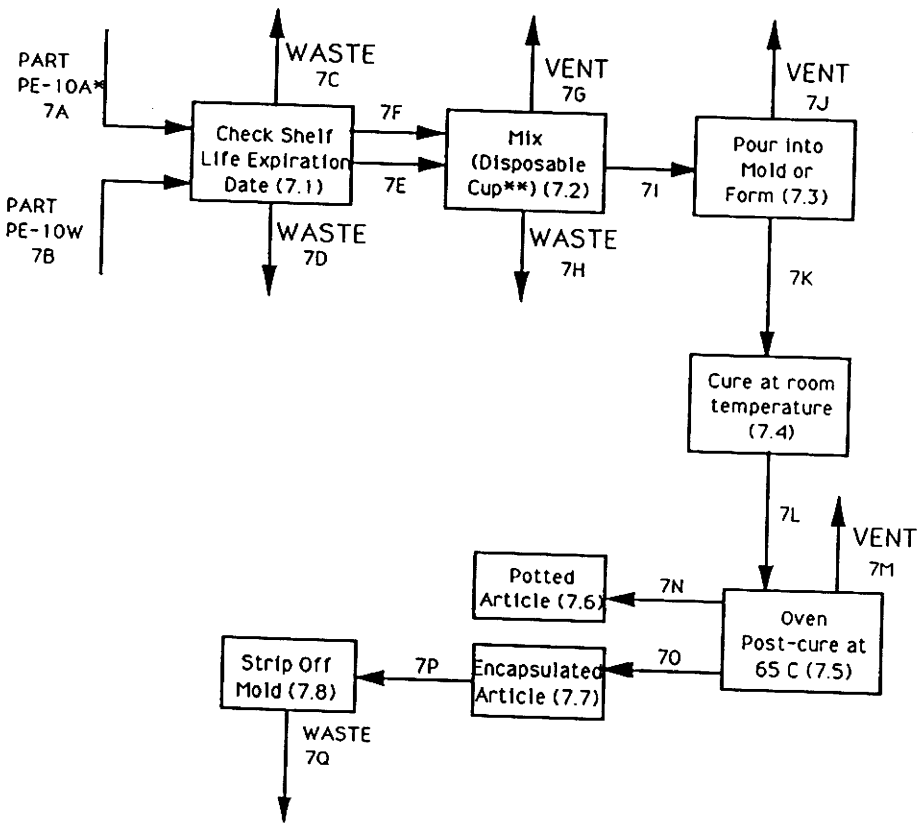
For questions 7.04-7.06, provide a separate response for each process block flow diagram provided in questions 7.01, 7.02, and 7.03. Identify the process type from which the information is extracted.

PART A MANUFACTURING AND PROCESSING PROCESS TYPE DESCRIPTION

7.01 In accordance with the instructions, provide a process block flow diagram showing t major (greatest volume) process type involving the listed substance.

CBI

[ ] Process type ..... Potting, Encapsulation PE-10



* CONTAINS TDI
** TIN FOIL OR PLASTIC
(ABOUT 150 GRAMS)

☒ Mark (X) this box if you attach a continuation sheet.

SECTION 7 MANUFACTURING AND PROCESSING INFORMATION

General Instructions:

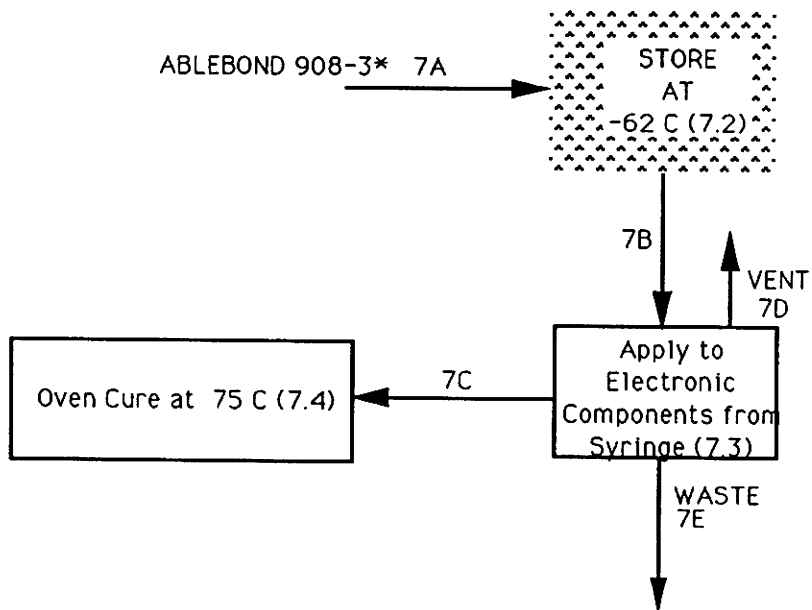
For questions 7.04-7.06, provide a separate response for each process block flow diagram provided in questions 7.01, 7.02, and 7.03. Identify the process type from which the information is extracted.

PART A MANUFACTURING AND PROCESSING PROCESS TYPE DESCRIPTION

7.01 In accordance with the instructions, provide a process block flow diagram showing the major (greatest volume) process type involving the listed substance.

CBI

[ ] Process type ..... Staking, Bonding 908-3



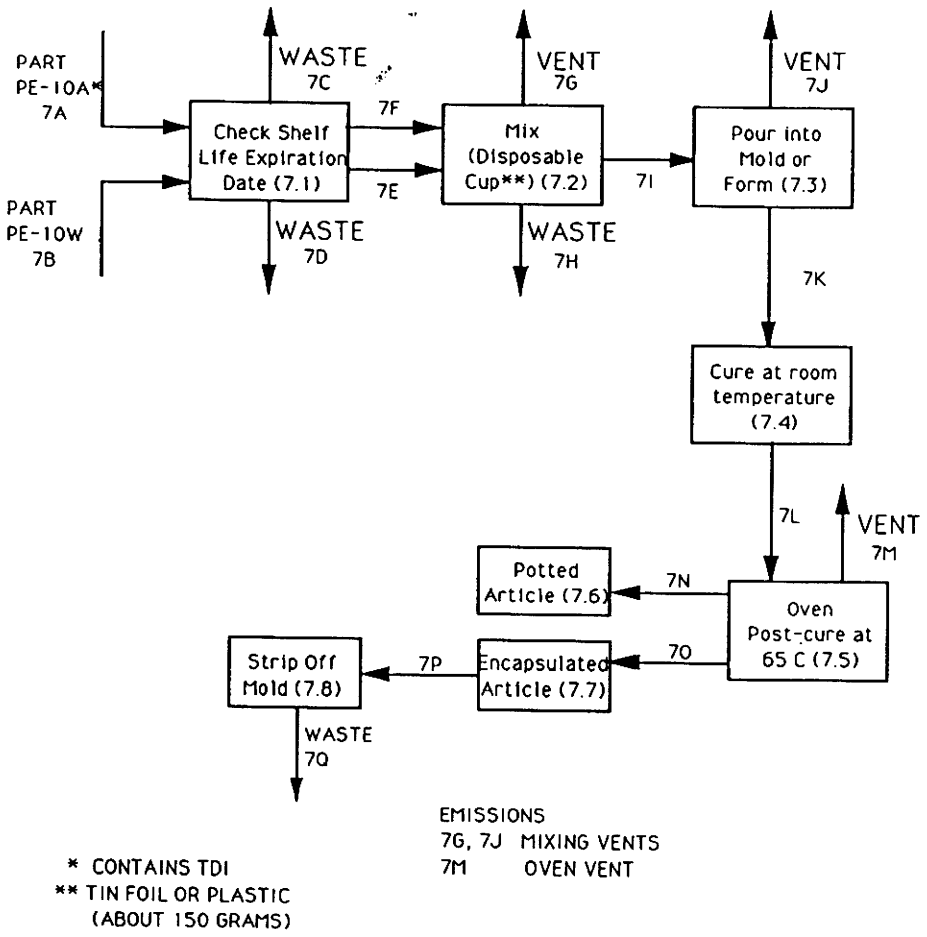
*PREPACKAGED IN SYRINGES

[ ] Mark (X) this box if you attach a continuation sheet.

7.03 In accordance with the instructions, provide a process block flow diagram showing al process emission streams and emission points that contain the listed substance and which, if combined, would total at least 90 percent of all facility emissions if not treated before emission into the environment. If all such emissions are released from one process type, provide a process block flow diagram using the instructions for question 7.01. If all such emissions are released from more than one process type, provide a process block flow diagram showing each process type as a separate block.

CBI

[ ] Process type ..... Potting, Encapsulation PE-10

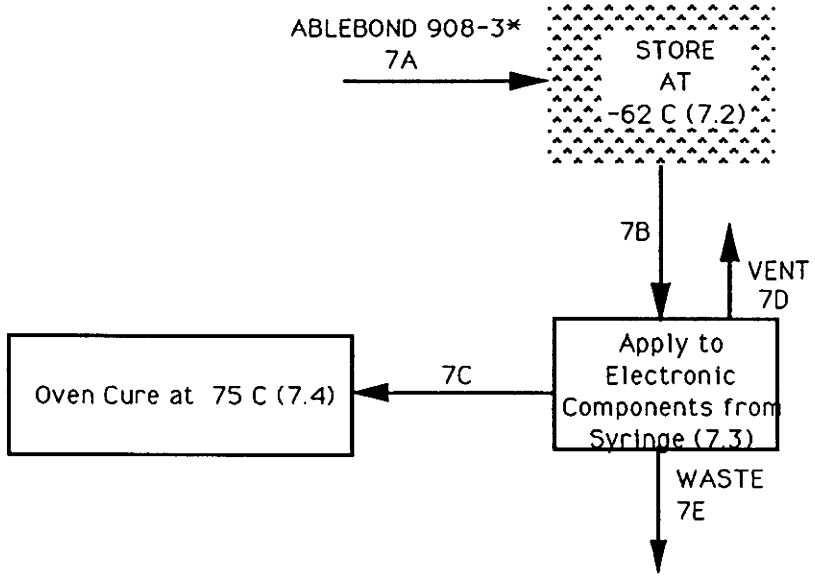


☒ Mark (X) this box if you attach a continuation sheet.

7.03 In accordance with the instructions, provide a process block flow diagram showing process emission streams and emission points that contain the listed substance and which, if combined, would total at least 90 percent of all facility emissions if n treated before emission into the environment. If all such emissions are released from one process type, provide a process block flow diagram using the instructions for question 7.01. If all such emissions are released from more than one process type, provide a process block flow diagram showing each process type as a separate block.

CBI

[ ] Process type ..... Bonding, Staking 908-3



*PREPACKAGED IN SYRINGES

EMISSIONS
7D APPLICATION VENT

[ ] Mark (X) this box if you attach a continuation sheet.

7.04 Describe the typical equipment types for each unit operation identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type.

CBI

[ ] Process type ..... Potting, Encapsulation PE-10

Unit Operation ID Number	Typical Equipment Type	Operating Temperature Range (°C)	Operating Pressure Range (mm Hg)	Vessel Composition
7.1	none	Not Applicable	Not Applicable	Not Applicable
7.2	cup	ambient	atmospheric	plastic or tin foil
7.3	molder form	ambient	atmospheric	aluminum
7.4	none	ambient	atmospheric	none
7.5	oven	65	atmospheric	steel/stainless steel
7.6	none	ambient	atmospheric	none
7.7	none	ambient	atmospheric	none
7.8	screw driver	ambient	atmospheric	steel

☒ Mark (X) this box if you attach a continuation sheet.

7.04 Describe the typical equipment types for each unit operation identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type.

CBI

[ ] Process type ..... Staking, Bonding 908-3

Unit Operation ID Number	Typical Equipment Type	Operating Temperature Range (°C)	Operating Pressure Range (mm Hg)	Vessel Composition
7.1	Freezer	-62	atmospheric	steel
7.2	Freezer	-62	atmospheric	steel
7.3	syringe	ambient	atmospheric	plastic
7.4	Oven	75	atmospheric	steel/stainless steel

[ ] Mark (X) this box if you attach a continuation sheet.

7.05 Describe each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type.

CBI

[ ] Process type ..... Potting, Encapsulation PE-10

Process Stream ID Code	Process Stream Description	Physical State[1]	Stream Flow (kg/yr)
7A	PE-10A	OL	20.4
7B	PE-10W	OL	20.4
7C	Expired PE-10A	OL	15.9
7D	Expired PE-10W	OL	17.0
7E	PE-10W	OL	3.4
7F	PE-10A	OL	4.5
7G	Mixing Vent	GU	40,000
7H	Spent Mixing Cup	SO	0.2

[1]Use the following codes to designate the physical state for each process stream:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

☒ Mark (X) this box if you attach a continuation sheet.

7.05 Describe each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type.

CBI

[ ] Process type ..... Potting, Encapsulation PE-10

Process Stream ID Code	Process Stream Description	Physical State[1]	Stream Flow (kg/yr)
7I	Reactive Mix	OL	7.7
7J	Mixing Vent	GU	40,000
7K	Curing Article	SO	7.7
7L	Postcuring Article	SO	7.7
7M	Oven Vent	GU	2,000
7N	Potted Article	SO	3.85
7O	Encapsulated Article	SO	3.85
7P	Cured Article	SO	3.85

[1]Use the following codes to designate the physical state for each process stream:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

[X] Mark (X) this box if you attach a continuation sheet.

7.05 Describe each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type.

CBI

[ ] Process type ..... Potting, Encapsulation PE-10

Process Stream ID Code	Process Stream Description	Physical State[1]	Stream Flow (kg/yr)
7Q	urethane	SO	0.2

[1]Use the following codes to designate the physical state for each process stream:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

☒ Mark (X) this box if you attach a continuation sheet.

7.05 Describe each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type.

CBI

[ ] Process type ..... Sta King, bonding 908-3

Process Stream ID Code	Process Stream Description	Physical State[1]	Stream Flow (kg/yr)
7A	frozen adhesive	SO	0.03
7B	frozen adhesive	SO	0.03
7C	thawing adhesive	OL	0.03
7D	application vent	GU	510.0
7E	curing article	SO	0.029
7F	reacted waste residual	SO	0.001

[1]Use the following codes to designate the physical state for each process stream:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

[ ] Mark (X) this box if you attach a continuation sheet.

7.06 Characterize each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the CBI instructions for further explanation and an example.)

[ ] Process type ..... Potting Encapsulation PE-10

a. Process Stream ID Code	b. Known Compounds[1]	c. Concentrations[2,3] (% or ppm)	d. Other Expected Compounds	e. Estimated Concentrations (% or ppm)
7A, 7C, 7F	Tolvene Diisocyanate	60%	NA	NA
	TDI Prepolymers	40%		
	(from MSDS and phone conversation with company representative)			
7B, 7D, 7E	Polyols	UK	NA	NA
	Surfactants	UK		
	catalysts	UK		
	blowing agents	UK	(from MSDS)	
7I	urethane	10%	NA	NA
	TDI	UK		
	TDI Prepolymers	UK		
	Polyols	UK		

7.06 continued below

☒ Mark (X) this box if you attach a continuation sheet.

7.06 Characterize each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the CBI instructions for further explanation and an example.)

[ ] Process type ..... Potting Encapsulation PE 10

a. Process Stream ID Code	b. Known Compounds[1]	c. Concentrations[2,3] (% or ppm)	d. Other Expected Compounds	e. Estimated Concentrations (% or ppm)
	surfactants	UK		
	catalysts	UK		
	blowing agents (E, WS)	UK		
7K	urethane	20%	UA	UA
	TDI	UK		
	TDI Prepolymers	UK		
	Polyols	UK		
	Surfactants	UK		
	catalysts	UK		
	blowing agents (E, WS)	UK		

7.06 continued below

[X] Mark (X) this box if you attach a continuation sheet.

7.06 Characterize each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the CBI instructions for further explanation and an example.)

[ ] Process type ..... Potting, Encapsulation PE-10

a. Process Stream ID Code	b. Known Compounds[1]	c. Concentrations[2,3] (% or ppm)	d. Other Expected Compounds	e. Estimated Concentrations (% or ppm)
7L	urethane	60%	NA	NA
	TDI	UK		
	TDI prepolymers	UK		
	Polyols	UK		
	Surfactants	UK		
	catalysts	UK		
	blowing agents (E,W)[4]	UK		
7N,7O,7P, 7Q	urethane	100%	NA	NA
	TDI, Polyols	UK		
	Prepolymers, Catalysts	UK		
	Surfactants, blowing agents (E,W)[4]	UK		

7.06 continued below

[X] Mark (X) this box if you attach a continuation sheet.

7.06 Characterize each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the CBI instructions for further explanation and an example.)

[ ] Process type ..... Potting, Encapsulation PE-10

a. Process Stream ID Code	b. Known Compounds[1]	c. Concentrations[2,3] (% or ppm)	d. Other Expected Compounds	e. Estimated Concentrations (% or ppm)
7G, 7J	TDI	<0.00001%	NA	NA
	Blowing Agents	<0.00001%		
	Air	>99.99998%		
	(E, W)			
7M	TDI	<0.00003%	NA	NA
	Blowing Agents	<0.00003%		
	Air	>99.99994%		
	(E, W)			

7.06 continued below

☒ Mark (X) this box if you attach a continuation sheet.

7.06 Characterize each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the CBI instructions for further explanation and an example.)

[ ] Process type ..... Staking, Bonding 908-3

a. Process Stream ID Code	b. Known Compounds[1]	c. Concentrations[2,3] (% or ppm)	d. Other Expected Compounds	e. Estimated Concentrations (% or ppm)
7A, 7B, 7C	Toluene diisocyanate	<1%	NA	NA
	Magnesium Oxide filler	75%		
	Prepolymer	12.5%		
	Polyol (E,W)	12.5%		
7D	Air	>99.99999%	NA	NA
	TDI (E,W)	<0.00001%		
7E	Urethane	20%	NA	NA
	Prepolymer	2.5%		
	Polyol	2.5%		
	Magnesium Oxide	75%		
	TDI (E,W)	<1%		

7.06 continued below

[X] Mark (X) this box if you attach a continuation sheet.

7.06 Characterize each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the CBI instructions for further explanation and an example.)

[ ] Process type ..... Staking, Bonding 908-3

a. Process Stream ID Code	b. Known Compounds[1]	c. Concentrations[2,3] (% or ppm)	d. Other Expected Compounds	e. Estimated Concentrations (% or ppm)
7F	urethane	25%	NA	NA
	Magnesium Oxide (E,W)	75%		

7.06 continued below

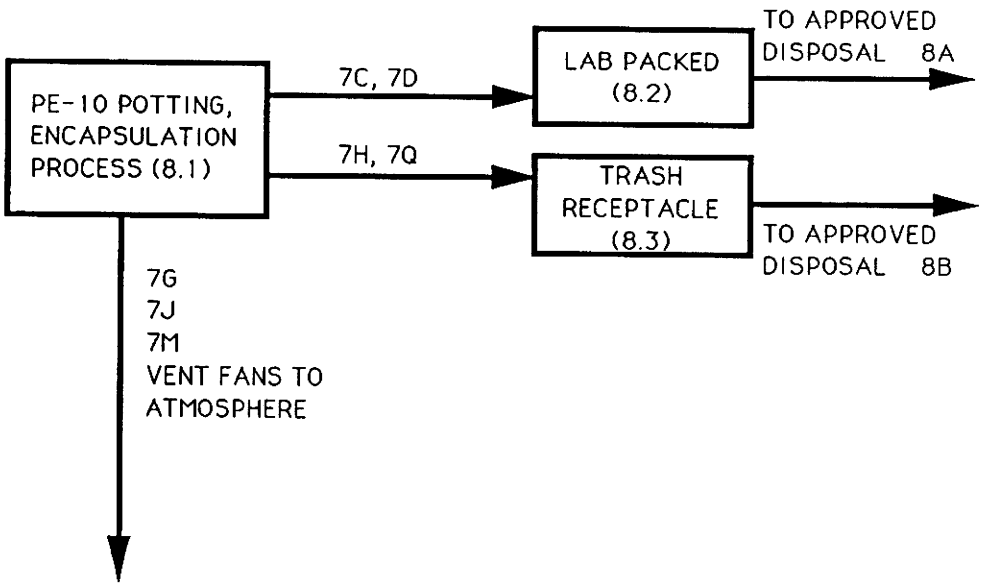
[ ] Mark (X) this box if you attach a continuation sheet.

PART A RESIDUAL TREATMENT PROCESS DESCRIPTION

8.01 In accordance with the instructions, provide a residual treatment block flow diagram which describes the treatment process used for residuals identified in question 7.01

CBI

[ ] Process type ..... Potting, Encapsulation PE-10



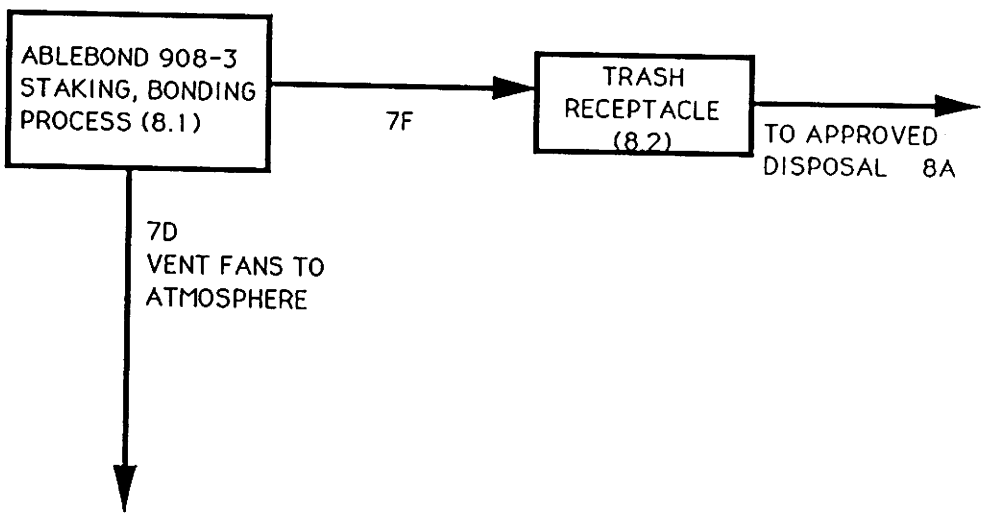
☒ Mark (X) this box if you attach a continuation sheet.

PART A RESIDUAL TREATMENT PROCESS DESCRIPTION

8.01 In accordance with the instructions, provide a residual treatment block flow diagra
which describes the treatment process used for residuals identified in question 7.0

CBI

[ ] Process type ..... Staking, Bonding 908-3



[ ] Mark (X) this box if you attach a continuation sheet.

PART B RESIDUAL GENERATION AND CHARACTERIZATION

8.05 Characterize each process stream identified in your residual treatment block flow diagram(s). If a residual treatment block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the instructions for further explanation and an example.)

CBI

[ ] Process type ..... Potting, Encapsulation PE-10

a. Stream ID Code	b. Type of Hazardous Waste[1]	c. Physical State of Residual[2]	d. Known Compounds[3]	e. Concentrations (% or ppm)[4,5,6]	f. Other Expected Compounds	g. Estimated Concentrations (% or ppm)
7C	R	OL(>300°F)	TDI*	60%	NA	NA
			TDI Prepolymer	40%		
7D	R	OL(>374°F)	Polyols	UK	NA	NA
			Surfactants	UK		
			Catalysts	UK		
			blowingagents	UK (from MSDS)		
7G, 7J	**	GU	Air	>99.99998%	NA	NA
			TDI	<0.00001%		
			Blowing Agents	<0.00001%		
7M	**	GU	Air	>99.99994%		
			TDI	<0.00003%		
			Blowing Agent	<0.00003%		

* from MSDS and phone conversation with company representative

8.05 continued below

** Not a hazardous waste

☒ Mark (X) this box if you attach a continuation sheet.

PART B RESIDUAL GENERATION AND CHARACTERIZATION

8.05 Characterize each process stream identified in your residual treatment block flow diagram(s). If a residual treatment block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the instructions for further explanation and an example.)

CBI

[ ] Process type ..... Potting, Encapsulation PE-10

a. Stream ID Code	b. Type of Hazardous Waste[1]	c. Physical State of Residual[2]	d. Known Compounds[3]	e. Concentrations (% or ppm)[4,5,6]	f. Other Expected Compounds	g. Estimated Concentrations (% or ppm)
7C	R	OL(>300°F)	TDI*	60%	NA	NA
			TDI Prepolymer	40%		
7D	R	OL(>374°F)	Polyols	UK	NA	NA
			Surfactants	UK		
			Catalysts	UK		
			blowingagents	UK (from MSDS)		
7G,7J	**	GU	Air	>99.99998%	NA	NA
			TDI	<0.00001%		
			Blowing Agents	<0.00001%		
7M	**	GU	Air	>99.99998%		
			TDI	<0.00001%		
			Blowing Agent	<0.00001%		

* from MSDS and phone conversation with company representative

8.05 continued below

** Not a hazardous waste

☒ Mark (X) this box if you attach a continuation sheet.

PART B RESIDUAL GENERATION AND CHARACTERIZATION

8.05 Characterize each process stream identified in your residual treatment block flow diagram(s). If a residual treatment block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the instructions for further explanation and an example.)

CBI

[ ] Process type ..... Staking, Bonding 908-3

a. Stream ID Code	b. Type of Hazardous Waste[1]	c. Physical State of Residual[2]	d. Known Compounds[3]	e. Concentrations (% or ppm)[4,5,6]	f. Other Expected Compounds	g. Estimated Concentrations (% or ppm)
7E	*	SO	urethane	25%	NA	NA
			magnesium oxide	75%		
			(E,W)			
7D	*	GU	Air	>99%	NA	NA
			TDI	<1%		
			(E,W)			

* Not a hazardous waste

8.05 continued below

[ ] Mark (X) this box if you attach a continuation sheet.

8.05 (continued)

[1]Use the following codes to designate the type of hazardous waste:

I = Ignitable
C = Corrosive
R = Reactive
E = EP toxic
T = Toxic
H = Acutely hazardous

[2]Use the following codes to designate the physical state of the residual:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

8.05 continued below

[ ] Mark (X) this box if you attach a continuation sheet.

8.06 Characterize each process stream identified in your residual treatment block flow diagram(s). If a residual treatment block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the instructions for further explanation and an example.)

CBI

[ ] Process type ..... Potting, Encapsulation PE-10

a. Stream ID Code	b. Waste Description Code[1]	c. Management Method Code[2]	d. Residual Quantities (kg/yr)	e. Management of Residual (%) On-Site	e. Management of Residual (%) Off-Site	f. Costs for Off-Site Management (per kg)	g. Changes in Management Methods
7C	B67	1A	15.9	100	-		none
		1ST	15.9	-	100	5.57*	none
		3I	15.9	-	100		none
7D	B67	1A	17.0	100	-		none
		1ST	17.0	-	100	5.57*	none
		3I	17.0	-	100		none
7H	B82	1D	0.2	-	100	$0.04	none
7Q	B82	1D	0.2	-	100	$0.04	none

*$5.57/kg includes cost of container storage and incineration.

[1] Use the codes provided in Exhibit 8-1 to designate the waste descriptions

[2] Use the codes provided in Exhibit 8-2 to designate the management methods

[X] Mark (X) this box if you attach a continuation sheet.

8.06 Characterize each process stream identified in your residual treatment block flow diagram(s). If a residual treatment block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the instructions for further explanation and an example.)

CBI

[ ] Process type ..... Potting, Encapsulation PE-10

a. Stream ID Code	b. Waste Description Code[1]	c. Management Method Code[2]	d. Residual Quantities (kg/yr)	e. Management of Residual (%) On-Site	e. Management of Residual (%) Off-Site	f. Costs for Off-Site Management (per kg)	g. Changes in Management Methods
7G	B57	M5a	0.01	NA*	NA	NA	NA
7J	B57	M5a	0.01	NA	NA	NA	NA
7M	B57	M5a	0.0005	NA	NA	NA	NA

* Not Applicable

[1] Use the codes provided in Exhibit 8-1 to designate the waste descriptions

[2] Use the codes provided in Exhibit 8-2 to designate the management methods

[ ] Mark (X) this box if you attach a continuation sheet.

8.06 Characterize each process stream identified in your residual treatment block flow diagram(s). If a residual treatment block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the instructions for further explanation and an example.)

CBI

[ ] Process type ..... Staking, Bonding 908-3

a. Stream ID Code	b. Waste Description Code[1]	c. Management Method Code[2]	d. Residual Quantities (kg/yr)	e. Management of Residual (%) On-Site	e. Management of Residual (%) Off-Site	f. Costs for Off-Site Management (per kg)	g. Changes in Management Methods
7E	B82	10	0.001	0	100	$0.04	None
7D	B57	M5a	0.000003	NA*	NA	NA	NA

* NA means not applicable

[1]Use the codes provided in Exhibit 8-1 to designate the waste descriptions

[2]Use the codes provided in Exhibit 8-2 to designate the management methods

[ ] Mark (X) this box if you attach a continuation sheet.

8.22 Describe the combustion chamber design parameters for each of the three largest (by capacity) incinerators that are used on-site to burn the residuals identified in your process block or residual treatment block flow diagram(s).

CBI

[ ] Not Required

Incinerator	Combustion Chamber Temperature (°C)		Location of Temperature Monitor		Residence Time In Combustion Chamber (seconds)	
	Primary	Secondary	Primary	Secondary	Primary	Secondary
1	—	—	—	—	—	—
2						
3						

Indicate if Office of Solid Waste survey has been submitted in lieu of response by circling the appropriate response.

Yes 1

No 2

8.23 Complete the following table for the three largest (by capacity) incinerators that are used on-site to burn the residuals identified in your process block or residual treatment block flow diagram(s).

CBI

[ ] Not Applicable

Incinerator	Air Pollution Control Device[1]	Types of Emissions Data Available
1	—	—
2		
3		

Indicate if Office of Solid Waste survey has been submitted in lieu of response by circling the appropriate response.

Yes 1

No 2

[1]Use the following codes to designate the air pollution control device:

S = Scrubber (include type of scrubber in parenthesis)
E = Electrostatic precipitator
O = Other (specify) _____

[ ] Mark (X) this box if you attach a continuation sheet.

SECTION 9 WORKER EXPOSURE

General Instructions:

Questions 9.03-9.25 apply only to those processes and workers involved in manufacturing or processing the listed substance. Do not include workers involved in residual waste treatment unless they are involved in this treatment process on a regular basis (i.e., exclude maintenance workers, construction workers, etc.).

[ ] Mark (X) this box if you attach a continuation sheet.

PART A EMPLOYMENT AND POTENTIAL EXPOSURE PROFILE

9.01 Mark (X) the appropriate column to indicate whether your company maintains records on the following data elements for hourly and salaried workers. Specify for each data element the year in which you began maintaining records and the number of years the records for that data element are maintained. (Refer to the instructions for further explanation and an example.)

CBI
[ ]

Data Element	Data are Maintained for: Hourly Workers	Data are Maintained for: Salaried Workers	Year in Which Data Collection Began	Number of Years Records Are Maintained
Date of hire	X	X	1956	*
Age at hire	X	X	1956	*
Work history of individual before employment at your facility	UK	UK	UK	UK
Sex	X	X	1956	*
Race	X	X	1956	*
Job titles	X	X	1956	*
Start date for each job title	X	X	1956	*
End date for each job title	X	X	1956	*
Work area industrial hygiene monitoring data	X	X	1985	*
Personal employee monitoring data	UK	UK	UK	UK
Employee medical history	X	X	1956	*
Employee smoking history	UK	UK	UK	UK
Accident history	X	X	1956	*
Retirement date	X	X	1956	*
Termination date	X	X	1956	*
Vital status of retirees	X	X	1956	*
Cause of death data	X	X	1956	*

[ ] Mark (X) this box if you attach a continuation sheet.

* Records are maintained indefinetly on all employees even if retired or deceased.

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9.02 In accordance with the instructions, complete the following table for each activity in which you engage.

CBI

[ ]

a. Activity	b. Process Category	c. Yearly Quantity (kg)	d. Total Workers	e. Total Worker-Hours
Manufacture of the listed substance	Enclosed	0	0	0
	Controlled Release	0	0	0
	Open	0	0	0
On-site use as reactant	Enclosed	0	0	0
	Controlled Release	1.3	UK	8/yr
	Open	1.3	UK	0.5/yr
On-site use as nonreactant	Enclosed	0	0	0
	Controlled Release	0	0	0
	Open	0	0	0
On-site preparation of products	Enclosed	0	0	0
	Controlled Release	0	0	0
	Open	0	0	0

[ ] Mark (X) this box if you attach a continuation sheet.

9.03 Provide a descriptive job title for each labor category at your facility that encompasses workers who may potentially come in contact with or be exposed to the listed substance.

CBI

[ ]

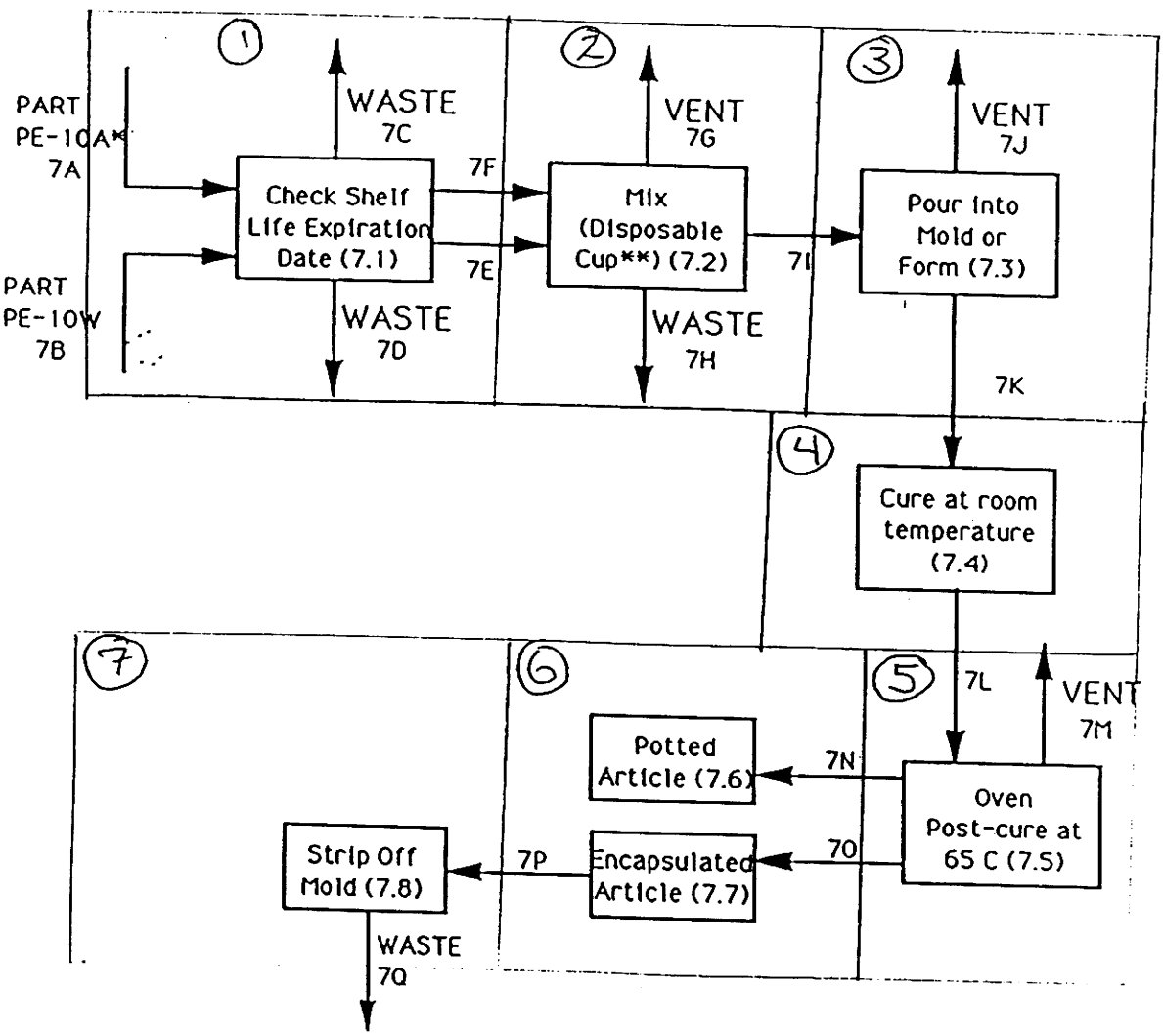
Labor Category	Descriptive Job Title
A	PRODUCTION ASSEMBLER
B	PROCESS TECHNICIAN
C	
D	
E	
F	
G	
H	
I	
J	

[ ] Mark (X) this box if you attach a continuation sheet.

9.04 In accordance with the instructions, provide your process block flow diagram(s) and indicate associated work areas.

CBI

[ ] Process type ..... POTTING & ENCAPSULATION PE-10

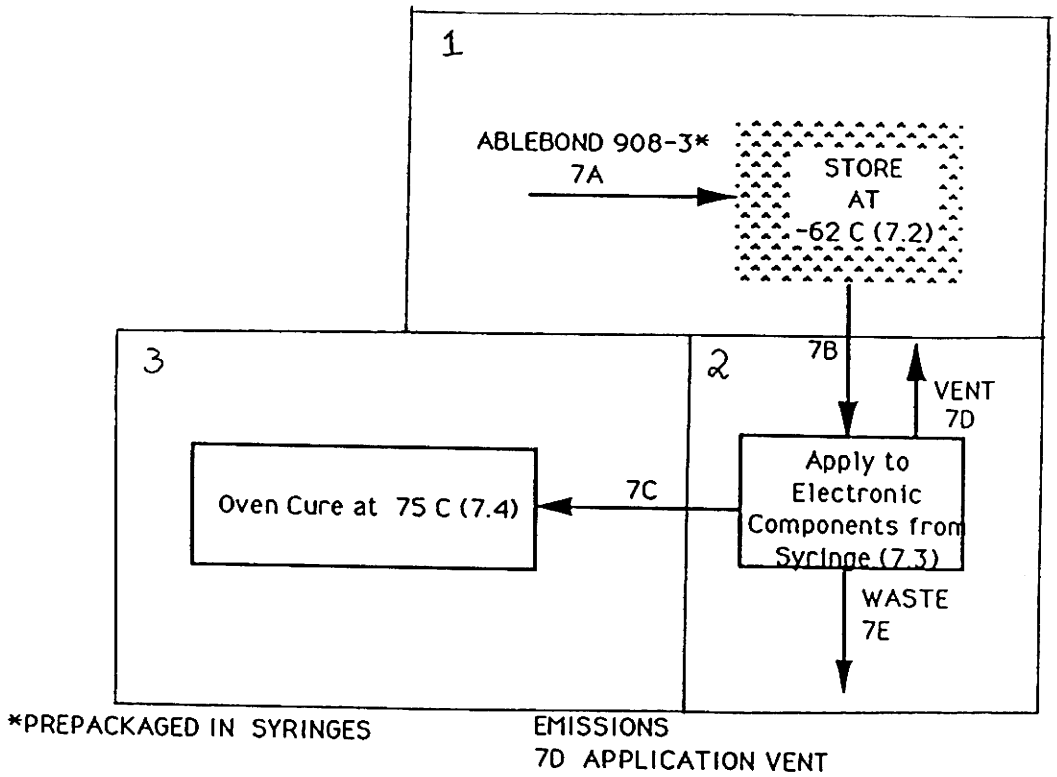


☒ Mark (X) this box if you attach a continuation sheet.

9.04 In accordance with the instructions, provide your process block flow diagram(s) and indicate associated work areas.

CBI

[X] Process type ..... STAKING AND BONDING 908-3



[ ] Mark (X) this box if you attach a continuation sheet.

9.05 Describe the various work area(s) shown in question 9.04 that encompass workers who may potentially come in contact with or be exposed to the listed substance. Add any additional areas not shown in the process block flow diagram in question 7.01 or 7.02. Photocopy this question and complete it separately for each process type.

CBI

[ ] Process type ..... Potting, Encapsulation PE-10

Work Area ID	Description of Work Areas and Worker Activities
1	Receipt and Storage
2	Assembler mixes material
3	Assembler pours into mold or form
4	Cure at Room Temperature
5	Assembler places/removes part from cure oven
6	Article Inspected
7	Remove Mold
8	
9	
10	

☒ Mark (X) this box if you attach a continuation sheet.

9.05 Describe the various work area(s) shown in question 9.04 that encompass workers who may potentially come in contact with or be exposed to the listed substance. Add any additional areas not shown in the process block flow diagram in question 7.01 or 7.02. Photocopy this question and complete it separately for each process type.

CBI

[ ] Process type ..... Staking & Bonding - 908-3

Work Area ID	Description of Work Areas and Worker Activities
1	Receipt and Storage
2	Production Assembler Uses Compound to stake/bond
3	Oven Cure (Worker places and removes component from oven
4	
5	
6	
7	
8	
9	
10	

[ ] Mark (X) this box if you attach a continuation sheet.

9.06 Complete the following table for each work area identified in question 9.05, and for each labor category at your facility that encompasses workers who may potentially come in contact with or be exposed to the listed substance. Photocopy this question
CBI and complete it separately for each process type and work area.

[ ] Process type ..... POTTING AND ENCAPSULATION PE-10

Work area ..... 2 → 6

Labor Category	Number of Workers Exposed	Mode of Exposure (e.g., direct skin contact)	Physical State of Listed Substance[1]	Average Length of Exposure Per Day[2]	Number of Days per Year Exposed
B	1	SKIN/INHALATION	OL,	A	32

[1]Use the following codes to designate the physical state of the listed substance at the point of exposure:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure; includes fumes, vapors, etc.)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

[2]Use the following codes to designate average length of exposure per day:

A = 15 minutes or less
B = Greater than 15 minutes, but not exceeding 1 hour
C = Greater than one hour, but not exceeding 2 hours
D = Greater than 2 hours, but not exceeding 4 hours
E = Greater than 4 hours, but not exceeding 8 hours
F = Greater than 8 hours

☒ Mark (X) this box if you attach a continuation sheet.

9.06 Complete the following table for each work area identified in question 9.05, and for each labor category at your facility that encompasses workers who may potentially come in contact with or be exposed to the listed substance. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type ..... STAKING AND BONDING (ABELBOND 90X-3)

Work area 2-3

Labor Category	Number of Workers Exposed	Mode of Exposure (e.g., direct skin contact)	Physical State of Listed Substance[1]	Average Length of Exposure Per Day[2]	Number of Days per Year Exposed
A	2	SKIN, INHALATION	OL	A	1

[1]Use the following codes to designate the physical state of the listed substance at the point of exposure:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure; includes fumes, vapors, etc.)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

[2]Use the following codes to designate average length of exposure per day:

A = 15 minutes or less
B = Greater than 15 minutes, but not exceeding 1 hour
C = Greater than one hour, but not exceeding 2 hours
D = Greater than 2 hours, but not exceeding 4 hours
E = Greater than 4 hours, but not exceeding 8 hours
F = Greater than 8 hours

[ ] Mark (X) this box if you attach a continuation sheet.

9.07 For each labor category represented in question 9.06, indicate the 8-hour Time Weighted Average (TWA) exposure levels and the 15-minute peak exposure levels. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type ..... POTTING AND ENCAPSULATION PE-10

Work area Z-6

Labor Category	8-hour TWA Exposure Level (ppm, mg/m^3, other-specify)	15-Minute Peak Exposure Level (ppm, mg/m^3, other-specify)
A	UK	UK

[X] Mark (X) this box if you attach a continuation sheet.

9.07 For each labor category represented in question 9.06, indicate the 8-hour Time Weighted Average (TWA) exposure levels and the 15-minute peak exposure levels. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type ..... STAKING & BONDING (ABELBOND 908-3)

Work area 2, 3

Labor Category	8-hour TWA Exposure Level (ppm, mg/m^3, other-specify)	15-Minute Peak Exposure Level (ppm, mg/m^3, other-specify)
A	UK	UK

[ ] Mark (X) this box if you attach a continuation sheet.

PART B WORK PLACE MONITORING PROGRAM

9.08 If you monitor worker exposure to the listed substance, complete the following table.

Not Sampled

CBI

[ ]

Sample/Test	Work Area ID	Testing Frequency (per year)	Number of Samples (per test)	Who Samples[1]	Analyzed In-House (Y/N)	Number of Years Records Maintained
Personal breathing zone	NA*	NA	NA	NA	NA	NA
General work area (air)	NA	NA	NA	NA	NA	NA
Wipe samples	NA	NA	NA	NA	NA	NA
Adhesive patches	NA	NA	NA	NA	NA	NA
Blood samples	NA	NA	NA	NA	NA	NA
Urine samples	NA	NA	NA	NA	NA	NA
Respiratory samples	NA	NA	NA	NA	NA	NA
Allergy tests	NA	NA	NA	NA	NA	NA
Other (specify) _____	NA	NA	NA	NA	NA	NA
Other (specify) _____	NA	NA	NA	NA	NA	NA
Other (specify) _____	NA	NA	NA	NA	NA	NA

* NA means Not Applicable

[1]Use the following codes to designate who takes the monitoring samples:

A = Plant industrial hygienist
B = Insurance carrier
C = OSHA consultant
D = Other (specify) _____

[ ] Mark (X) this box if you attach a continuation sheet.

9.09 For each sample type identified in question 9.08, describe the type of sampling and analytical methodology used for each type of sample.

CBI

[ ]	Sample Type	Sampling and Analytical Methodology
	NA	

9.10 If you conduct personal and/or ambient air monitoring for the listed substance, specify the following information for each equipment type used.

CBI

[ ]	Equipment Type[1]	Detection Limit[2]	Manufacturer	Averaging Time (hr)	Model Number
	NA				

[1]Use the following codes to designate personal air monitoring equipment types:

A = Passive dosimeter
B = Detector tube
C = Charcoal filtration tube with pump
D = Other (specify) _____

Use the following codes to designate ambient air monitoring equipment types:

E = Stationary monitors located within work area
F = Stationary monitors located within facility
G = Stationary monitors located at plant boundary
H = Mobile monitoring equipment (specify) _____
I = Other (specify) _____

[2]Use the following codes to designate detection limit units:

A = ppm
B = Fibers/cubic centimeter (f/cc)
C = Micrograms/cubic meter (μ/m^3)

[ ] Mark (X) this box if you attach a continuation sheet.

9.11 If you conduct routine medical tests for monitoring the health effects of exposure to the listed substance, specify the type and frequency of the tests.

CBI

[ ]	Test Description	Frequency (weekly, monthly, yearly, etc.)
	NA	NA

[ ] Mark (X) this box if you attach a continuation sheet.

PART C ENGINEERING CONTROLS

9.12 Describe the engineering controls that you use to reduce or eliminate worker exposure to the listed substance. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type ..... Potting, Encapsulation, PE-10

Work area 2-7

Engineering Controls	Used (Y/N)	Year Installed	Upgraded (Y/N)	Year Upgraded
Ventilation:				
Local exhaust	Y	< 1980	Y	1988
General dilution	Y	< 1960	Y	1988
Other (specify)				
Vessel emission controls	Y	NA	NA	NA
Mechanical loading or packaging equipment				
Other (specify)				

[X] Mark (X) this box if you attach a continuation sheet.

PART C ENGINEERING CONTROLS

9.12 Describe the engineering controls that you use to reduce or eliminate worker exposure to the listed substance. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type ..... Staking & Bonding 908-3

Work area 2-3

Engineering Controls	Used (Y/N)	Year Installed	Upgraded (Y/N)	Year Upgraded
Ventilation:				
Local exhaust	Y	<1980	Y	1988
General dilution	Y	<1960	Y	1988
Other (specify)				
Vessel emission controls	Y	NA	NA	NA
Mechanical loading or packaging equipment				
Other (specify)				

[ ] Mark (X) this box if you attach a continuation sheet.

9.13 Describe all equipment or process modifications you have made within the 3 years prior to the reporting year that have resulted in a reduction of worker exposure to the listed substance. For each equipment or process modification described, state the percentage reduction in exposure that resulted. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type ..... NA

Work area .....

Equipment or Process Modification	Reduction in Worker Exposure Per Year (%)
NA	NA

[ ] Mark (X) this box if you attach a continuation sheet.

PART D PERSONAL PROTECTIVE AND SAFETY EQUIPMENT

9.14 Describe the personal protective and safety equipment that your workers wear or use in each work area in order to reduce or eliminate their exposure to the listed substance. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type ..... Potting, Encapsulation, PE-10

Work area 2-6

Equipment Types	Wear or Use (Y/N)
Respirators	N
Safety goggles/glasses	Y
Face shields	Y
Coveralls	N
Bib aprons	Y
Chemical-resistant gloves	Y
Other (specify)	
_____	_____
_____	_____

[X] Mark (X) this box if you attach a continuation sheet.

PART D PERSONAL PROTECTIVE AND SAFETY EQUIPMENT

9.14 Describe the personal protective and safety equipment that your workers wear or use in each work area in order to reduce or eliminate their exposure to the listed substance. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type ..... Staking & Bonding 908-3

Work area 2-3

Equipment Types	Wear or Use (Y/N)
Respirators	N
Safety goggles/glasses	Y
Face shields	N
Coveralls	N
Bib aprons	N
Chemical-resistant gloves	Y
Other (specify)	

[ ] Mark (X) this box if you attach a continuation sheet.

9.15 If workers use respirators when working with the listed substance, specify for each process type, the work areas where the respirators are used, the type of respirators used, the average usage, whether or not the respirators were fit tested, and the type and frequency of the fit tests. Photocopy this question and complete it separately for each process type.

CBI

[ ] Process type ..... N/A

Work Area	Respirator Type	Average Usage[1]	Fit Tested (Y/N)	Type of Fit Test[2]	Frequency of Fit Tests (per year)
	N/A				

[1] Use the following codes to designate average usage:

A = Daily
B = Weekly
C = Monthly
D = Once a year
E = Other (specify) _____

[2] Use the following codes to designate the type of fit test:

QL = Qualitative
QT = Quantitative

[ ] Mark (X) this box if you attach a continuation sheet.

PART E WORK PRACTICES

9.19 Describe all of the work practices and administrative controls used to reduce or eliminate worker exposure to the listed substance (e.g., restrict entrance only to authorized workers, mark areas with warning signs, insure worker detection and monitoring practices, provide worker training programs, etc.). Photocopy this question and complete it separately for each process type and work area.

CBI

[ ]

Process type ..... Potting, Encapsulation PE-10

Work area 1-6

Restrict Access to Authorized Workers
Insure Worker Detection & Monitoring Practices
Worker Training Programs.
Personal Protective Equipment

9.20 Indicate (X) how often you perform each housekeeping task used to clean up routine leaks or spills of the listed substance. Photocopy this question and complete it separately for each process type and work area.

Process type .....

Work area .....

Housekeeping Tasks	Less Than Once Per Day	1-2 Times Per Day	3-4 Times Per Day	More Than 4 Times Per Day
Sweeping				
Vacuuming				
Water flushing of floors				
Other (specify)				
Swab with methyl chloroform		X		

☒ Mark (X) this box if you attach a continuation sheet.

PART E WORK PRACTICES

9.19 Describe all of the work practices and administrative controls used to reduce or eliminate worker exposure to the listed substance (e.g., restrict entrance only to authorized workers, mark areas with warning signs, insure worker detection and monitoring practices, provide worker training programs, etc.). Photocopy this question and complete it separately for each process type and work area.

CBI

[ ]

Process type ..... Staking & Bonding 908-3

Work area 1-3

Restrict Entrance only to Authorized Workers
Insure Worker Detection & Monitoring Practices
Worker Training Programs
Personal Protective Equipment

9.20 Indicate (X) how often you perform each housekeeping task used to clean up routine leaks or spills of the listed substance. Photocopy this question and complete it separately for each process type and work area.

Process type .....

Work area .....

Housekeeping Tasks	Less Than Once Per Day	1-2 Times Per Day	3-4 Times Per Day	More Than 4 Times Per Day
Sweeping				
Vacuuming				
Water flushing of floors				
Other (specify)				
Swab with methyl chloroform		X		

[ ] Mark (X) this box if you attach a continuation sheet.

9.21 Do you have a written medical action plan for responding to routine or emergency exposure to the listed substance?

Routine exposure

Yes 1

(No) 2

Emergency exposure

Yes 1

(No) 2

If yes, where are copies of the plan maintained?

Routine exposure: _____

Emergency exposure: _____

9.22 Do you have a written leak and spill cleanup plan that addresses the listed substance? Circle the appropriate response.

(Yes) 1

No 2

If yes, where are copies of the plan maintained? ENVIRONMENTAL / SAFETY OFFICE EMERGENCY RESPONSE TEAMS

Has this plan been coordinated with state or local government response organizations? Circle the appropriate response.

(Yes) 1

No 2

9.23 Who is responsible for monitoring worker safety at your facility? Circle the appropriate response.

Plant safety specialist 1

Insurance carrier 2

OSHA consultant 3

Other (specify) INDUSTRIAL HYGIENISTS ..... (4)

[ ] Mark (X) this box if you attach a continuation sheet.

SECTION 10 ENVIRONMENTAL RELEASE

General Instructions:

Complete Part E (questions 10.23-10.35) for each non-routine release involving the listed substance that occurred during the reporting year. Report on all releases that are equal to or greater than the listed substance's reportable quantity value, RQ, unless the release is federally permitted as defined in 42 U.S.C. 9601, or is specifically excluded under the definition of release as defined in 40 CFR 302.3(22). Reportable quantities are codified in 40 CFR Part 302. If the listed substance is not a hazardous substance under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) and, thus, does not have an RQ, then report releases that exceed 2,270 kg. If such a substance however, is designated as a CERCLA hazardous substance, then report those releases that are equal to or greater than the RQ. The facility may have answered these questions or similar questions under the Agency's Accidental Release Information Program and may already have this information readily available. Assign a number to each release and use this number throughout this part to identify the release. Releases over more than a 24-hour period are not single releases, i.e., the release of a chemical substance equal to or greater than an RQ must be reported as a separate release for each 24-hour period the release exceeds the RQ.

For questions 10.25-10.35, answer the questions for each release identified in question 10.23. Photocopy these questions and complete them separately for each release.

PART A GENERAL INFORMATION

10.01 Where is your facility located? Circle all appropriate responses.

CBI

[ ] Industrial area 1

Urban area 2

Residential area ..... (3)

Agricultural area 4

Rural area 5

Adjacent to a park or a recreational area 6

Within 1 mile of a navigable waterway 7

Within 1 mile of a school, university, hospital, or nursing home facility ..... (8)

Within 1 mile of a non-navigable waterway ..... (9)

Other (specify) _____ 10

[ ] Mark (X) this box if you attach a continuation sheet.

10.02 Specify the exact location of your facility (from central point where process unit is located) in terms of latitude and longitude or Universal Transverse Mercader (UTM) coordinates.

Latitude ..... 33 ° 27 ' 45 "

Longitude ..... 111 ° 54 ' 13 "

UTM coordinates ..... Zone _____, Northing _____, Easting _____

10.03 If you monitor meteorological conditions in the vicinity of your facility, provide the following information. Not Required

Average annual precipitation ..... — inches/year

Predominant wind direction ..... —

10.04 Indicate the depth to groundwater below your facility. Not Required

Depth to groundwater ..... — meters

10.05 For each on-site activity listed, indicate (Y/N/NA) all routine releases of the listed substance to the environment. (Refer to the instructions for a definition of Y, N, and NA.)

CBI

[ ]

On-Site Activity	Environmental Release		
	Air	Water	Land
Manufacturing	NA	NA	NA
Importing	NA	NA	NA
Processing	Y	N	N
Otherwise used	NA	NA	NA
Product or residual storage	N	N	N
Disposal	NA	NA	NA
Transport	NA	NA	NA

[ ] Mark (X) this box if you attach a continuation sheet.

10.06 Provide the following information for the listed substance and specify the level of precision for each item. (Refer to the instructions for further explanation and an example.)

CBI

[ ]

Quantity discharged to the air	0,021	kg/yr ± UK %
Quantity discharged in wastewaters	0	kg/yr ± 0 %
Quantity managed as other waste in on-site treatment, storage, or disposal units	0	kg/yr ± 0 %
Quantity managed as other waste in off-site treatment, storage, or disposal units	10.9	kg/yr ± UK %

[ ] Mark (X) this box if you attach a continuation sheet.

10.08 Describe the control technologies used to minimize release of the listed substance for each process stream containing the listed substance as identified in your process block or residual treatment block flow diagram(s). Photocopy this question and complete it separately for each process type.

CBI

[ ] Process type ..... All

Stream ID Code	Control Technology	Percent Efficiency
All Vent Streams	NONE	0

[ ] Mark (X) this box if you attach a continuation sheet.

10.09 Point Source Emissions -- Identify each emission point source containing the listed substance in terms of a Stream ID Code as identified in your process block or residual treatment block flow diagram(s), and provide a description of each point source. Do not include raw material and product storage vents, or fugitive emission sources (e.g., equipment leaks). Photocopy this question and complete it separately for each process type.

CBI

[ ]

Process type ..... Potting, Encapsulation PE-10

Point Source ID Code	Description of Emission Point Source
7G	Mixing Vent
7J	Pouring Vent
7M	Oven Vent

☒ Mark (X) this box if you attach a continuation sheet.

PART B RELEASE TO AIR

10.09 Point Source Emissions -- Identify each emission point source containing the listed substance in terms of a Stream ID Code as identified in your process block or residual treatment block flow diagram(s), and provide a description of each point source. Do not include raw material and product storage vents, or fugitive emission sources (e.g., equipment leaks). Photocopy this question and complete it separately for each process type.

CBI
[ ]

Process type ..... Bonding, Staking 908-3

Point Source ID Code	Description of Emission Point Source
7D	Application Vent

[ ] Mark (X) this box if you attach a continuation sheet.

[X] Mark (X) this box if you attach a continuation sheet.

10.10 Emission Characteristics - - Characterize the emissions for each Point Source ID Code identified in question 10.09 by completing the following table.

CBI

[ ]

Potting, Encapsulation, PE-10

Point Source ID Code	Physical State[1]	Average Emissions (kg/day)	Frequency[2] (days/yr)	Duration[3] (min/day)	Average Emission Factor[4]	Maximum Emission Rate (kg/min)	Maximum Emission Rate Frequency (events/yr)	Maximum Emission Rate Duration (min/event)
7G	V	0.0003	32	0.5	—*	UK	UK	UK
7J	V	0.0003	32	0.3	—	UK	UK	UK
7M	V	0.00002	32	90	—	UK	UK	UK

[1]Use the following codes to designate physical state at the point of release:
G = Gas; V = Vapor; P = Particulate; A = Aerosol; O = Other (specify) _____

[2]Frequency of emission at any level of emission

[3]Duration of emission at any level of emission

[4]Average Emission Factor — Provide estimated (± 25 percent) emission factor (kg of emission per kg of production of listed substance)

* The listed substance is not produced.

10.10 Emission Characteristics - - Characterize the emissions for each Point Source ID Code identified in question 10.09 by completing the following table.

CBI

[ ] Mark (X) this box if you attach a continuation sheet.

Staking, Bonding 908-3

Point Source ID Code	Physical State[1]	Average Emissions (kg/day)	Frequency[2] (days/yr)	Duration[3] (min/day)	Average Emission Factor[4]	Maximum Emission Rate (kg/min)	Maximum Emission Rate Frequency (events/yr)	Maximum Emission Rate Duration (min/event)
7D	V	0.000003	1	5	—*	UK	UK	UK

[1]Use the following codes to designate physical state at the point of release:
G = Gas; V = Vapor; P = Particulate; A = Aerosol; O = Other (specify) _____

[2]Frequency of emission at any level of emission

[3]Duration of emission at any level of emission

[4]Average Emission Factor — Provide estimated (± 25 percent) emission factor (kg of emission per kg of production of listed substance)

* The listed substance is not produced.

10.11 Stack Parameters -- Identify the stack parameters for each Point Source ID Code identified in question 10.09 by completing the following table.

CBI

[ ]

Potting, Encapsulation PE-10

Point Source ID Code	Stack Height(m)	Stack Inner Diameter (at outlet) (m)	Exhaust Temperature (°C)	Emission Exit Velocity (m/sec)	Building Height(m)[1]	Building Width(m)[2]	Vent Type[3]
7G	9.9*	0.61	25	12.7	8.7	122	V
7J	9.9*	0.61	25	12.7	8.7	122	V
7H	9.9*	0.61	25	12.7	8.7	122	V

*Includes height of the building

[1]Height of attached or adjacent building

[2]Width of attached or adjacent building

[3]Use the following codes to designate vent type:

H = Horizontal
V = Vertical

☒ Mark (X) this box if you attach a continuation sheet.

10.11 Stack Parameters -- Identify the stack parameters for each Point Source ID Code identified in question 10.09 by completing the following table.

CBI

[ ]

Staking, Bonding 908-3

Point Source ID Code	Stack Height(m)	Stack Inner Diameter (at outlet) (m)	Exhaust Temperature (°C)	Emission Exit Velocity (m/sec)	Building Height(m)[1]	Building Width(m)[2]	Vent Type[3]
70	10.5*	0.36	25	12.7	8.7	91	V

* Includes height of building

[1]Height of attached or adjacent building

[2]Width of attached or adjacent building

[3]Use the following codes to designate vent type:

H = Horizontal
V = Vertical

[ ] Mark (X) this box if you attach a continuation sheet.

10.12 If the listed substance is emitted in particulate form, indicate the particle size distribution for each Point Source ID Code identified in question 10.09. Photocopy this question and complete it separately for each emission point source.

CBI

[ ]

Point source ID code ..... No particulate emissions

Size Range (microns)	Mass Fraction (% ± % precision)
< 1	—
≥ 1 to < 10	—
≥ 10 to < 30	—
≥ 30 to < 50	—
≥ 50 to < 100	—
≥ 100 to < 500	—
≥ 500	—

Total = 100%

[ ] Mark (X) this box if you attach a continuation sheet.

PART C FUGITIVE EMISSIONS

10.13 Equipment Leaks -- Complete the following table by providing the number of equipment types listed which are exposed to the listed substance and which are in service according to the specified weight percent of the listed substance passing through the component. Do this for each process type identified in your process block or residual treatment block flow diagram(s). Do not include equipment types that are not exposed to the listed substance. If this is a batch or intermittently operated process, give an overall percentage of time per year that the process type is exposed to the listed substance. Photocopy this question and complete it separately for each process type.

CBI

[ ] Process type ..... *

Percentage of time per year that the listed substance is exposed to this process type ..... — %

Equipment Type	Number of Components in Service by Weight Percent of Listed Substance in Process Stream					
	Less than 5%	5-10%	11-25%	26-75%	76-99%	Greater than 99%
Pump seals[1]						
Packed	—	—	—	—	—	—
Mechanical	—	—	—	—	—	—
Double mechanical[2]	—	—	—	—	—	—
Compressor seals[1]	—	—	—	—	—	—
Flanges	—	—	—	—	—	—
Valves						
Gas[3]	—	—	—	—	—	—
Liquid	—	—	—	—	—	—
Pressure relief devices[4] (Gas or vapor only)	—	—	—	—	—	—
Sample connections						
Gas	—	—	—	—	—	—
Liquid	—	—	—	—	—	—
Open-ended lines[5] (e.g., purge, vent)						
Gas	—	—	—	—	—	—
Liquid	—	—	—	—	—	—

*"—" means not applicable

[1]List the number of pump and compressor seals, rather than the number of pumps or compressors

10.13 continued on next page

[ ] Mark (X) this box if you attach a continuation sheet.

10.13 (continued)

[2]If double mechanical seals are operated with the barrier (B) fluid at a pressure greater than the pump stuffing box pressure and/or equipped with a sensor (S) that will detect failure of the seal system, the barrier fluid system, or both, indicate with a "B" and/or an "S", respectively

[3]Conditions existing in the valve during normal operation

[4]Report all pressure relief devices in service, including those equipped with control devices

[5]Lines closed during normal operation that would be used during maintenance operations

---

10.14 Pressure Relief Devices with Controls -- Complete the following table for those pressure relief devices identified in 10.13 to indicate which pressure relief devices in service are controlled. If a pressure relief device is not controlled, enter "None" under column c.

CBI
[ ]

a. Number of Pressure Relief Devices *	b. Percent Chemical in Vessel[1]	c. Control Device	d. Estimated Control Efficiency[2]

* "—" means not applicable

[1]Refer to the table in question 10.13 and record the percent range given under the heading entitled "Number of Components in Service by Weight Percent of Listed Substance" (e.g., <5%, 5-10%, 11-25%, etc.)

[2]The EPA assigns a control efficiency of 100 percent for equipment leaks controlled with rupture discs under normal operating conditions. The EPA assigns a control efficiency of 98 percent for emissions routed to a flare under normal operating conditions

---

[ ] Mark (X) this box if you attach a continuation sheet.

10.15 Equipment Leak Detection -- If a formal leak detection and repair program is in place, complete the following table regarding those leak detection and repair procedures. Photocopy this question and complete it separately for each process type.

CBI

[ ] Process type ..... ——— *

Equipment Type	Leak Detection Concentration (ppm or mg/m^3) Measured at ____ Inches from Source	Detection Device[1]	Frequency of Leak Detection (per year)	Repairs Initiated (days after detection)	Repairs Completed (days after initiated)
Pump seals					
Packed	—	—	—	—	—
Mechanical	—	—	—	—	—
Double mechanical	—	—	—	—	—
Compressor seals	—	—	—	—	—
Flanges	—	—	—	—	—
Valves					
Gas	—	—	—	—	—
Liquid	—	—	—	—	—
Pressure relief devices (gas or vapor only)	—	—	—	—	—
Sample connections					
Gas	—	—	—	—	—
Liquid	—	—	—	—	—
Open-ended lines					
Gas	—	—	—	—	—
Liquid	—	—	—	—	—

* "———" means not applicable

[1]Use the following codes to designate detection device:

POVA = Portable organic vapor analyzer
FPM = Fixed point monitoring
O = Other (specify) _____

[ ] Mark (X) this box if you attach a continuation sheet.

10.16 Raw Material, Intermediate and Product Storage Emissions - - Complete the following table by providing the information on each liquid raw material, intermediate, and product storage vessel containing the listed substance as identified in your process block or residual treatment block flow diagram(s). These equipment characteristics do not apply.

CBI

[ ]

Vessel Type[1]	Floating Roof Seals[2]	Composition of Stored Materials[3]	Throughput (liters per year)	Vessel Filling Rate (gpm)	Vessel Filling Duration (min)	Vessel Inner Diameter (m)	Vessel Height (m)	Operating Vessel Volume (l)	Vessel Emission Controls[4]	Design Flow Rate[5]	Vent Diameter (cm)	Control Efficiency (%)	Basis for Estimate[6]
—*	—	—	—	—	—	—	—	—	—	—	—	—	—

*"—" means Not Applicable

[1]Use the following codes to designate vessel type:

F = Fixed roof
CIF = Contact internal floating roof
NCIF = Noncontact internal floating roof
EFR = External floating roof
P = Pressure vessel (indicate pressure rating)
H = Horizontal
U = Underground

[2]Use the following codes to designate floating roof seals:

MS1 = Mechanical shoe, primary
MS2 = Shoe-mounted secondary
MS2R = Rim-mounted, secondary
LM1 = Liquid-mounted resilient filled seal, primary
LM2 = Rim-mounted shield
LMW = Weather shield
VM1 = Vapor mounted resilient filled seal, primary
VM2 = Rim-mounted secondary
VMW = Weather shield

[3]Indicate weight percent of the listed substance. Include the total volatile organic content in parenthesis

[4]Other than floating roofs

[5]Gas/vapor flow rate the emission control device was designed to handle (specify flow rate units)

[6]Use the following codes to designate basis for estimate of control efficiency:

C = Calculations
S = Sampling

[ ] Mark (X) this box if you attach a continuation sheet.

PART E NON-ROUTINE RELEASES

10.23 Indicate the date and time when the release occurred and when the release ceased or was stopped. If there were more than six releases, attach a continuation sheet and list all releases.

Release	Date Started	Time (am/pm)	Date Stopped	Time (am/pm)
1	— *	—	—	—
2				
3				
4				
5				
6				

10.24 Specify the weather conditions at the time of each release.

Not Required

Release	Wind Speed (km/hr)	Wind Direction	Humidity (%)	Temperature (°C)	Precipitation (Y/N)
1					
2					
3					
4					
5					
6					

* "—" means not applicable

[ ] Mark (X) this box if you attach a continuation sheet.